

PSYCHOLOGICAL ABSTRACTS

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GENERAL (incl. Statistics)

5258. [Anon.] **Walter Dill Scott.** *J. consult. Psychol.*, 1940, 4, 161.—Portrait.

5259. [Anon.] **Vita and bibliography of Bernard Glueck.** *J. crim. Psychopath.*, 1940, 2, 89-94.—This is a summary of Glueck's work in the fields of psychiatry and criminal psychopathology. He is President of the New York Society of Psychopathology and Psychotherapy, and Vice-President of the American Psychopathological Society. A complete bibliography of his publications is included.—*A. Chapanis* (Child Guidance Study; Franklin, Tenn.).

5260. **Bartlett, R. J.** **Measurement in psychology.** *Nature, Lond.*, 1939, 144, 498-502.—This is a condensation of the presidential address delivered to Section J (Psychology) of the British Association for the Advancement of Science. The author states as his task "a review of experimental psychology that will reveal the senses in which the word measurement is being used by psychologists." The review considers the use of measurement in psychophysics, in physiological investigations, in intelligence tests, vocational tests, and personality tests.—*G. F. J. Lekner* (Miami).

5261. **Beritashvili, I.** **Studies on central nervous activity.** *C. R. Acad. Sci. U. R. S. S.*, 1939, 23, 76-80.—A general statement of the systematic position and plans for the future of the Institute for the Study of Animal Behavior and the Physiological Institute of the Stalin State University, Tbilissi.—*L. A. Riggs* (Vermont).

5262. **Church, D. E.** **Speed methods of statistics for use in business.** New York: Ronald Press, 1940. Pp. 122. \$3.00.

5263. **Coombs, C. H.** **A criterion for the number of factors in a table of intercorrelations.** *Psychol. Bull.*, 1940, 37, 455.—Abstract.

5264. **Coxe, W. W.** **Professional problems of applied psychology.** *J. consult. Psychol.*, 1940, 4, 96-103.—"The professional problems of applied psychology relate more to the functioning of psychological findings in society than to their nature." Distinctions are drawn between professional and scientific psychologists and psychological technicians. Social matters of concern to psychologists are the increasing complexity of business and governmental organization, the problems of industrialization and municipal, state and national planning. Specific professional problems relate to standards of training and practice, licensing and certification, employment and salaries. There is a need for educating the public regarding the contributions of psychology.

Because of the need for adaptation to changing social and economic conditions the demand for professional psychological services is likely to increase.—*P. S. de Q. Cabot* (Simmons).

5265. **Craig, A. T.** **On the mathematics of the representative method of sampling.** *Ann. math. Statist.*, 1939, 10, 26-34.—The main purpose of this paper is that of enumerating some of the theorems and methods of mathematical statistics which serve useful purposes in the method of stratified random sampling. The problem of the estimation of unknown parameters of a statistical population, in the terms of Markoff's theorem and Neyman's modification of Markoff's method, and the estimation of ratios, are discussed.—*V. J. Sharkey* (Rochester).

5266. **Darley, J. G., & Berdie, R.** **The fields of applied psychology.** *J. consult. Psychol.*, 1940, 4, 41-52.—This is a report to the Committee on Professional Employment of the A.A.A.P. of a survey the purpose of which "is to identify the people engaged in the various branches of applied psychology and to discover what their duties, qualifications, training and other professional qualifications are."—*P. S. de Q. Cabot* (Simmons).

5267. **Dilger, J.** **Das Gauss'sche Streuungsgesetz in der praktischen Psychologie.** (The Gaussian law of distribution in practical psychology.) *Industr. Psychotech.*, 1940, 17, 1-20.—Various aspects of the normal distribution curve are discussed, including convenient division into groups, approximate mathematical functions, tabulation of performance values, and selective factors. 5 performance groups are recommended for most practical purposes. Determining rank orders within a group at the end of the curve is important for evaluating athletic, school, and other performances where all cases fall within the range of relative adequacy. For vocational purposes, the predominant factor in a combination of capacities may be determined.—*H. D. Spoerl* (American International College).

5268. **Dorcus, R. M., & Mount, G. E.** **A simple and accurate method of calibrating chronoscopes.** *Amer. J. Psychol.*, 1940, 53, 442-444.—*D. E. Johannsen* (Skidmore).

5269. **Dunphy, E. B.** **Foreword.** *Arch. Ophthalmol., Chicago*, 1940, 24, 1-9.—A biographical sketch of Dr. F. H. Verhoeff to whom this issue of the Archives is dedicated. A list of his publications is appended.—*M. R. Stoll* (American Optical Co.).

5270. **Eisenhart, C.** **The interpretation of certain regression methods and their use in biological and industrial research.** *Ann. math. Statist.*, 1939, 10, 162-186.—Some of the ideas involved in current curve-fitting practices are reviewed so that it be-

comes clear why, when one is interested in estimating X from Y , it is in some instances necessary to follow out curve-fitting practices with Y as the dependent variable and then use the inverse of the relation found. The types of problem to which this method of inverse regression affords a solution are indicated and the confidence interval nature of the estimates it provides is emphasized. The method is exemplified by the detailed solution of an industrial and a biological problem.—V. J. Sharkey (Rochester).

5271. Gilbert, L. C. A projector-stand to facilitate plotting. *Amer. J. Psychol.*, 1940, 53, 441-442.—A device to aid in plotting eye-movements from motion-picture film.—D. E. Johannsen (Skidmore).

5272. Helson, H. The Eleventh Annual Meeting of the Eastern Psychological Association. *Amer. J. Psychol.*, 1940, 53, 462-464.—D. E. Johannsen (Skidmore).

5273. Herrnfeld, F. P., & Sjaardema, H. An improved amplifier for electro-encephalography. *J. exp. Psychol.*, 1940, 27, 208-215.—The amplifier described in this report has the following features: (1) The output impedance matches the recording galvanometer. (2) The frequency range is restricted in order to keep the apparatus free from pick-up of outside interference. (3) The available gain of the amplifier is sufficient to record abnormal, as well as normal, voltages. (4) The amplifier is an A. C. operated device. (5) The apparatus is sufficiently compact and light to be portable.—H. W. Karn (Pittsburgh).

5274. Lafleur, L. J. Conceptual relativity. *J. Phil.*, 1940, 37, 421-431.—The author supports a principle of conceptual relativism, namely that there may be an unlimited number of alternative theories of the same real system, by a discussion of various ideas of individuality used in modern biology, psychology, and philosophy. He maintains that in each science several concepts of individuality are true and that the type of concept selected for description or interpretation depends on pragmatic criteria.—J. H. Jackson (Brown).

5275. Lancaster, W. B., & Ames, A., Jr. Obituary; Alfred Bielschowsky. 1871-1940.—*Arch. Ophthalmol.*, Chicago, 1940, 23, 1354-1365.—M. R. Stoll (American Optical Co.).

5276. Lawshe, C. H., Jr. Two devices for measuring driving speed on the highway. *Amer. J. Psychol.*, 1940, 53, 435-441.—D. E. Johannsen (Skidmore).

5277. Lynch, J. A. A theory of the stimulus. *Psychol. Bull.*, 1940, 37, 454.—Abstract.

5278. McGraw, M. B. A procedure for quantitating behavior studies. *Psychol. Bull.*, 1940, 37, 522-523.—Abstract.

5279. McNemar, Q. On the number of factors. *Psychol. Bull.*, 1940, 37, 455-456.—Abstract.

5280. Mira y López, E. Problemas psicológicos actuales. (Current psychological problems.) Buenos Aires: El Ateneo. 1940. Pp. 262.—This is a collec-

tion of 5 related essays on the psychology of pain, the new experimental concept of ethical conduct, psychological education for social life, psychopathology of emotion, and the psychology of revolution. The fundamental idea of the book is the utilization of resources, whatever their origin, for understanding "the mysterious reality of personality," its destiny in the world, and the search for the bases of human existence. The author confesses that the essays are subjective, and that his interest lies less in the purely psychological than in man acting in society.—M. E. Morse (Baltimore).

5281. Morrow, R. S. An experimental analysis of the theory of independent abilities. *Psychol. Bull.*, 1940, 37, 514.—Abstract.

5282. Schumann, T. E. W. The principles of a mechanical method for calculating regression coefficients and for the solution of simultaneous linear equations. *Phil. Mag.*, 1940, 29, 258-273.—A simple machine has been devised for the purpose of saving time in computing multiple correlation coefficients. The machine supplies values for the constants of an regression equation. There is no limit to the number of independent variables which the machine may be designed to handle. Correlations involving two independent variables are computed with the use of the machine in about 35% of the time necessary for numerical computation. With 9 independent variables this figure is reduced to about 8%. A small model of the machine has already demonstrated a sufficiently close agreement between experimental and theoretical values for the required constants. The machine may also be modified slightly for use in solving simultaneous linear equations.—L. A. Riggs (Vermont).

5283. Seguin, C. A. Freud, un gran explorador del alma. (Freud, a great explorer of the soul.) Buenos Aires: Orientacion Integral Humana, 1940. Pp. 120. Pesos 1.50.—Biography of Freud and the most important aspects of his theories. The work of Freud is considered in the light of his precursors.—J. E. Bader (Brandon State School).

5284. Shuttleworth, F. K. Sampling errors involved in incomplete returns to mail questionnaires. *Psychol. Bull.*, 1940, 37, 437.—Abstract.

5285. Stoddard, S. E., & Fisk, C. A new device for measuring the galvanic skin response. *Amer. J. Psychol.*, 1940, 53, 444-445.—D. E. Johannsen (Skidmore).

5286. Symonds, P. M. Leta S. Hollingworth. *J. consult. Psychol.*, 1940, 4, 140.—A brief review of the contributions of the deceased to psychology.—P. S. de Q. Cabot (Simmons).

5287. Wald, A. Contributions to the theory of statistical estimation and testing hypotheses. *Ann. math. Statist.*, 1939, 10, 299-326.—A general formulation of the problems of testing hypotheses and of statistical estimation is made. For the determination of the best system of regions of acceptance, methods and principles which are closely related to those of the Neyman-Pearson theory of testing hypotheses, are used. Methods for the determina-

tion of a system of regions of acceptance taking into account type 2 errors, made by accepting an hypothesis when it is false, are developed. Some theorems concerning best estimates are demonstrated.—V. J. Sharkey (Rochester).

5288. Wile, I. S. **Body-mind unity.** *Amer. J. Orthopsychiat.*, 1940, 10, 532-548.—The human organism is conditioned not only by its biologic unity, but also by its social stimulation. The psychic effects of so-called physical disorders, acute or chronic, are observable in toxic states, neuroses, syphilis, encephalitis, etc. Probably every organic disease carries with it a psychic larval state. However, the question of whether and how mental states bring about physiologic and structural changes is still unanswered. Perhaps a psychogenic origin may be attributed to exophthalmic goitre, gastric ulcers, spastic colon, etc. The psyche is an organic agent and the organism is a psychophysical entity. Social planning must include an integrated program based on mental and physical hygiene fostering freedom and responsibility, health, and sanity for the greatest number of individuals.—R. E. Perl (New York City).

5289. Wilson, E. B. **The sampling error of the median.** *Science*, 1940, 92, 58-59.—The author demonstrates that the formula $\sigma_M = 1/2 \varphi_M \sqrt{n}$ for the standard deviation of the median, where φ_M is the value of φ at the median M , cannot be universally valid like the formula $\sigma_{\text{Mean}} = \sigma/\sqrt{n}$ for the mean.—F. A. Mote, Jr. (Connecticut).

5290. Zürneck, E. **Prof. G. Terruzzi's Audiphonstroboskop.** (The audiphone stroboscope of Prof. G. Terruzzi.) *Dtsch. Sonderschule*, 1940, 7, 105-111.—P. L. Krieger (Leipzig).

[See also abstracts 5380, 5699.]

NERVOUS SYSTEM

5291. Bagchi, B. K. **The message of muscles and nerves.** *Sci. & Cult., Calcutta*, 1938, 4.—A discussion of investigations of the electrical activity of muscles and nerves, in which the work of Sherrington on reflexes, of Erlanger and Gasser on nervous activity, and of Berger and others on cortical potentials is reviewed.—R. M. Gagné (Brown).

5292. Bagchi, B. K. **The origin of cortical potentials.** *Sci. & Cult., Calcutta*, 1939, 5, 132.—Various hypotheses concerning the origin of cortical potentials are discussed and the early views of Berger and Adrian contrasted and examined in the light of more recent evidence. Some of this evidence indicates that there are several foci which give rise to the alpha waves. These, however, are evidently influenced by activity from other, possibly subcortical, centers.—R. M. Gagné (Brown).

5293. Bagchi, B. K. **Electroencephalography.** *Sci. & Cult., Calcutta*, 1940, 5, 559.—This is a preliminary report of a study of encephalograms of 14 normal Indian subjects. 3 subjects showed occipital alpha rhythm over 75% of the time, 2 over 50% of the time, 4 over 25% of the time, and 5 less than

25% of the time. A 15-watt light reduced the alpha rhythm in 68.3% of 71 cases, with an average latent period of .421 sec. Further investigation on normal and abnormal cases is in progress.—R. M. Gagné (Brown).

5294. Baudouin, A., & Fischgold, H. **L'électro-encephalogramme humain et son utilisation clinique.** (Human electroencephalography and its clinical utilization.) *Biol. méd.*, 1939, No. 10.—The authors review the progress of electroencephalography. Methods of obtaining records are described and typical waves and conditions under which they are obtained are explained. Records obtained under special conditions are reviewed: effect of drugs, hypoglycemia, organic lesions, feeble-mindedness, hysteria, and epilepsy. They emphasize the value of EEG in clinical practice in locating tumours, in determining insulin dosage in treatment of schizophrenia, and in determining epilepsy.—J. E. Bader (Brandon State School).

5295. Finan, J. L. **An analysis of frontal lobe function in monkeys by means of two "delayed response" methods.** *Psychol. Bull.*, 1940, 37, 496-497.—Abstract.

5296. Freeman, G. L. **Cortical autonomous rhythms and the excitatory levels of other bodily tissues.** *J. exp. Psychol.*, 1940, 27, 160-171.—Electroencephalograms were recorded concurrently with palmar skin resistance and muscle action potentials when both the internal preparation and external stimulation varied. During conditions of rest and of experimentally induced tension, changes in the excitation level of skeletal and autonomic tissues appeared at the same time as the alpha rhythm. The introduction of external stimuli (electric shocks and light flashes) tended to increase or decrease the activity of the cortical cells, depending upon whether the excitation level of the postural or preparatory tissue activities was enhanced or depressed.—H. W. Karn (Pittsburgh).

5297. Girden, E. **The rôle of the auditory area of the cortex.** *Amer. J. Psychol.*, 1940, 53, 371-383.—"Evidence is offered to show that there is a specific cortical auditory area, which when extirpated will abolish the L-R habit as well as the CR's upon which it is based. Restricted lesions within the limits of this area will only temporarily depress this function, spontaneous recovery occurring within a period of about 5 days. It is not possible to disrupt the L-R discrimination for specific pitches. During the period of depression following restricted lesions, auditory acuity is also impaired. Complete recovery of function occurs after a longer period of time; approximately 7-8 days. The severe temporary impairments in acuity differ in the two animals from pitch to pitch. To explain these facts, it is suggested that a primary projection system of the peripheral acoustic mechanism exists at the cortex, whereby particular pitches are mediated by different areas (place theory). But in emergencies, such as produced by ablation of restricted portions of the auditory area, normal function is maintained by a

principle of equipotentiality. That is, the intact auditory cortex is still capable of mediating normal hearing according to the number of nerve impulses produced by the respective tones (frequency or volley theory)."—D. E. Johannsen (Skidmore).

5298. Girden, E. **Cerebral mechanisms in conditioning under curare.** *Amer. J. Psychol.*, 1940, 53, 397-406.—The present study attempts to check the hypothesis that curare acts to produce a condition of functional decortication by actually decorticating the animal. The cortical auditory areas were removed from 3 dogs, aged 1-2 years. Conditioning was to a bell sounded for 3 sec.; the unconditioned stimulus was a shock to one foot. 2 animals were trained under curare and tested after return to normal; one animal was first conditioned in the normal state and tested in the subsequent drugged condition. The semitendinosus muscles were exposed under ether anesthesia. It was found that regardless of the state under which the conditioning was established, the CR persisted in the following reverse condition. CR's developed in a normal state appear to be mediated by cortical pathways, while those developed under curare are mediated by subcortical pathways; when a section of the cortical pathway is extirpated, the block between the normal and curare states is disrupted and CR's set up in either condition will be manifest in the other state. The data are considered theoretically.—D. E. Johannsen (Skidmore).

5299. Goodwin, J. E., & Hall, G. E. **The human electroencephalogram and its clinical significance.** *Canad. med. Ass. J.*, 1939, 41, 146-150; 239-245.—M. E. Morse (Baltimore).

5300. Henry, C. E. **Brain potentials during sleep: an investigation of electroencephalographic individual differences and their constancy.** *Psychol. Bull.*, 1940, 37, 494-495.—Abstract.

5301. Hermann, H., Jourdan, F., Morin, G., & Vial, J. **Observations complémentaires sur le comportement du chien sans moelle bistellectomisé, puis bivagotomisé.** (Complementary observations on the behavior of the dog without spinal cord and with bilateral stellectomy and vagotomy.) *C. R. Soc. Biol. Paris*, 1939, 131, 284-286.—(*Biol. Abstr.* XIV: 10300).

5302. Ingham, S. D. **The neural basis of knowledge and the synthesis of concepts.** *Bull. Los Angeles neurol. Soc.*, 1939, 4, 139-144.—For psychological purposes the neural system consists of (1) the diencephalon, neuraxis, and peripheral structures and (2) the cerebral cortex with its subcortical connections. All mental development depends on synaptic growth in the second part. Particularly, memory depends on engram formation by synaptic completion, and concept synthesis on the formation of multiple engrams, ultimately related in the posterior association areas. "It may be confidently stated that the mental superiority of man is attributable, not to keener sensory perceptions, nor to more dominating instinctive motivations, but to the capacity to synthesize sensations into concepts, and

concepts into abstractions."—D. K. Spelt (Mississippi).

5303. Ingham, S. D. **The functional relations of the primary, secondary and tertiary visual cortical areas.** *Bull. Los Angeles neurol. Soc.*, 1940, 5, 12-17.—An arteriosclerotic male, 58 years old, suddenly developed complete blindness, headaches, and mental confusion. Unable to recall doctors' names (loss of auditory memory), he could describe correctly routes for travel within San Francisco (retention of visual memory) 6 days after the accident. There was gradual recovery of 5° of macular vision including color discrimination and reading. When the patient died 2 years later, autopsy revealed (1) bilateral destruction of area 17, except for a small intact portion at each occipital pole, (2) bilateral destruction of area 18 on the mesial surface, (3) slight destruction of area 18 on the inferior surface of the left hemisphere, (4) some subcortical involvement in the upper part of the lesion. It is suggested that the retention of visual memory is due to the integrity of areas 19 and 39.—D. K. Spelt (Mississippi).

5304. Kappauf, W. E. **The function of the visual cortex in relation to level of brightness adaptation.** *Psychol. Bull.*, 1940, 37, 495-496.—Abstract.

5305. Landahl, H. D. **Contributions to the mathematical biophysics of the central nervous system.** *Bull. Math. Biophys.*, 1939, 1, 95-118.—(*Biol. Abstr.* XIV: 10306).

5306. Lipman, E. A. **Comparative exploration of the auditory cortex in the dog by conditioning and electrical methods.** *Psychol. Bull.*, 1940, 37, 497.—Abstract.

5307. Mayer, L. L. **The optic pathway.** *Arch. Ophthal.*, Chicago, 1940, 23, 382-394.—Various functional disturbances are correlated in detail with anatomical relations in the optic pathway. Helpful methods of presenting this type of material to students are indicated by various charts and diagrams and by a three-dimensional representation of serial sections of the optic pathway.—M. R. Stoll (American Optical Company).

5308. Minkowski, M. **Zur Kenntnis der zerebralen Sehbahnen.** (Study of the cerebral optic tracts.) *Schweiz. med. Wschr.*, 1939, 69, Part 2, 990-995.—Crossed and uncrossed fibers are found separately in the occipital cortex.—P. L. Krieger (Leipzig).

5309. Parsons, F. H. **Psychological tests of patients one year after section of corpus callosum.** *Psychol. Bull.*, 1940, 37, 498.—Abstract.

5310. Pennington, L. A. **The destruction of cortical tissue without opening the skull.** *Psychol. Bull.*, 1940, 37, 464-465.—Abstract.

5311. Raney, R. B., & Neilsen, J. M. **Spatial disorientation; diagnostic differentiation between frontal and occipital lesions.** *Bull. Los Angeles neurol. Soc.*, 1940, 5, 73-77.—A blow on the head induced amnesia (5-6 hours) and partial confusion (2 weeks) in a 35 year old male. Clear recall of geographical relations, together with periodic dis-

orientation, indicated a frontal lesion, since patients with occipital lesions cannot recall spatial relations. At operation an encapsulated hemorrhage was removed from the right frontal lobe. A complete case history is included.—*D. K. Spelt* (Mississippi).

5312. Rashevsky, N. On the so called plasticity of the central nervous system. *Bull. Math. Biophys.*, 1939, 1, 93-94.—(*Biol. Abstr.* XIV: 10309).

5313. Rosenbaum, H. Experiments concerning the problem of chemical mediation in the central nervous system. *Arch. int. Pharmacodyn.*, 1939, 63, 417-427.—(*Biol. Abstr.* XIV: 10251).

5314. Smith, K. U. An experimental analysis of bilateral motor coordination in man before and after section of the corpus collosum. *Psychol. Bull.*, 1940, 37, 498.—Abstract.

5315. Spiegel, E. A., & Scala, N. P. Role of the cervical sympathetic nerve in the light reflex of the pupil. *Arch. Ophthalmol.*, Chicago, 1940, 23, 371-376.—Evidence here presented indicates that the Argyll Robertson pupil effect is dependent not on paralysis of the dilator mechanism, but on impairment of the reflex apparatus inducing contraction of the sphincter. Cats were used in experiments which yielded the following data: section of the cervical sympathetic decreases dilatation in the dark only slightly, and this decrease can be temporarily abolished by instillation of benzedrine sulphate into the conjunctival sac. After section of the third nerve at the base of the brain, no changes in pupil size with dark adaptation could be noted. Records of the electrical potentials of cervical sympathetic nerves indicated no change when the retinas of curarized animals were alternately illuminated and darkened. Apparently the cervical sympathetic participates in the normal pupillary reaction to light only by enhancing the effect of sphincter relaxation by maintaining the tonus of the dilator. Contraction of the sphincter in response to light stimulation is apparently the essential characteristic of the reflex.—*M. R. Stoll* (American Optical Company).

5316. Webb, D. A., & Young, J. Z. Electrolyte content and action potential of the giant nerve fibres of *Loligo*. *J. Physiol.*, 1940, 98, 299-313.—Action potentials were recorded from isolated and cleaned giant nerve fibers of *Loligo forbis*; the same fibers were then analysed chemically. The average concentrations of chloride, potassium, and total base in the axoplasm are 109 mM and 477 m. eq. respectively per kg. of water; ionic and osmotic deficits are large. The observed action potentials approximate closely the diffusion potentials which would be produced if the bounding membrane of the axoplasm was permeable only to K, except during the passage of the impulse. These results are compared with the available data for the electrolyte content of other types of cells.—*M. E. Morse* (Baltimore).

[See also abstracts 5273, 5360, 5368, 5389, 5482, 5483, 5539, 5549, 5555, 5556, 5571, 5663, 5668, 5669, 5764, 5767.]

RECEPTIVE AND PERCEPTUAL PROCESSES

5317. Avery, G. T. The observation of visual cues and the influence of pattern on white rats on an elevated, inclined maze. *Psychol. Bull.*, 1940, 37, 502-503.—Abstract.

5318. Bair, H. L. Some fundamental physiologic principles in study of the visual field. *Arch. Ophthalmol.*, Chicago, 1940, 24, 10-20.—A calculation of the differential sensitivity of the fovea for different sizes of test objects at different levels of illumination in the presence of ametropias varying from 1-10 diopters indicates that the effect of the ametropia is much less at the lower intensity level. The differential sensitivity for different sizes of stimuli and different degrees of eccentricity at various brightness levels was investigated for one normal subject. It was found that the gradient is least at low adaptation levels. These data suggest the desirability of studying field changes under conditions of low illumination, since variations consequent upon normal differences in sensitivity of various parts of the retina will then be reduced to a minimum. The greater central sensitivity for red as compared with blue, contrasted with the greater peripheral sensitivity for blue as compared with red, is considered to be responsible for the impression that reduced sensitivity for blue is associated with disease of the retinal epithelium while earlier loss of red sensitivity is associated with pathology of the conducting mechanism.—*M. R. Stoll* (American Optical Company).

5319. Baldrian, K. Gibt es eine Besserung des Hörens Taubstummer mit Hör-Resten? (Can deafmutes with residual hearing improve their hearing?) *Msschr. Ohrenheilk.*, 1940, 74, 242-246.—An effort is described for facilitating the comprehension of sounds, words, and sentences of deafmutes, who could formerly speak, by utilizing the co-operation of individuals who speak but who have comparable auditory defects.—*P. L. Krieger* (Leipzig).

5320. Bartley, S. H. Some factors in recurrent vision. *Psychol. Bull.*, 1940, 37, 502.—Abstract.

5321. Boring, E. G. The size of the differential limen for pitch. *Amer. J. Psychol.*, 1940, 53, 450-455.—The author points out the discrepancy in the sizes of the DL for pitch as determined by different investigators, varying from .16 to 3.10 c.p.s. for frequency 100-131. In general, the smaller DL's were obtained by early experimenters, leading to the wide acceptance of Luft's contention that there are 11,000 discriminable pitches. The experimental results of 7 different investigators (1827-1931) are analyzed and the differences in psychophysical procedure, stimuli, training of O's, manner of expressing sensitivity, etc., pointed out. It is concluded that there is at present no method of determining the ear's maximal sensitivity without artifacts; the ideal would be to determine the DL by a method of abrupt change which would still avoid transients.—*D. E. Johansen* (Skidmore).

5322. Börnstein, W. Beitrag zur Frage der physiologischen Grundlagen des Wahrnehmens. II. Über den Einfluss "heller" und "dunkler" Reize auf den Melanophoren-Zustand der Amphibien-Haut. (Contribution to the problem of the physiological foundations of perception. II. On the influence of "light" and "dark" stimuli on the condition of the melanophores of the amphibian skin.) *Arch. int. Pharmacodyn.*, 1939, **61**, 387-417.—(*Biol. Abstr.* XIII: 13051).

5323. Brock, F. W. Projection habits in alternate squints. *Amer. J. Optom.*, 1940, **17**, 193-207.—The author investigates further the peculiarities in projection habits associated with alternating squints, referring frequently to Verhoeff's contributions and introducing some techniques of his own. He denies that anomalous retinal correspondence exists in alternators, apparently on the ground that various tests indicate some disparity in position between the projected images of the 2 eyes when one fixates and the corresponding image of the other is brought to attention by distortion or vertical displacement. The anomalous projection habits associated with alternating squint are considered to require further study, for the projection of the images of the non-dominant eye to fit into the spatial system determined by the fixing eye can be variously demonstrated but is not yet explained.—*M. R. Stoll* (American Optical Company).

5324. Craik, K. J. W. Transmission of light by the eye media. *J. Physiol.*, 1940, **98**, 179-184.—Craik tested Stiles and Crawford's hypothesis of directional sensitivity of the retina by direct measurements of light transmission through the central and marginal parts of the lens and cornea in the excised eyes of the cat, using Ludvigh and McCarthy's photocell technique. His results corroborate Stiles and Crawford's explanation. Persistent irregular variations in transmission up to 10%, and a steady decline at the extreme margin were found, but the curve is totally different from that obtained by subjective investigation in man, the discrepancy being often as much as 50%.—*M. E. Morse* (Baltimore).

5325. Craik, K. J. W. Origin of visual after-images. *Nature, Lond.*, 1940, **145**, 512.—Retinal anoxemia, produced by pressure on the eyeball, will result in a condition of temporary blindness during which the eye may be stimulated with a bright light. When the pressure is removed and normal vision is restored a positive or negative after-image of the light may be observed, although the light has had no effect upon the higher or lower visual centres at the time of stimulation. In this way retinal and central origins of visual after-images are readily distinguishable. Such experiments confirm the view that a positive after-image seen against a dark ground is due to retinal after-discharge, and a negative image on a bright ground to local reduction of retinal sensitivity. The clearest images are obtained under conditions where the other eye may be used to secure steady fixation upon the stimulating light.—*L. A. Riggs* (Vermont).

5326. Crannell, C. W. Perceptual factors in tactual pressure discrimination. *Psychol. Bull.*, 1940, **37**, 526.—Abstract.

5327. Crozier, W. J. On the law for minimal discrimination of intensities. IV. ΔI as a function of intensity. *Proc. nat. Acad. Sci., Wash.*, 1940, **26**, 382-389.—Theories of visual excitation based on study of the Weber fraction $\Delta I/I$ have advanced the supposition that the quantity ΔI produces a certain amount or rate of decomposition of a photo-sensitive substance in a photochemical system adapted to a given intensity I . This may be rejected because there is no reason to assume that (1) the magnitude or the properties of ΔI are determined peripherally in the receptor, and (2) the threshold effect is physically constant. Another theory, based on simple assumptions already supported by direct evidence, is that the excitability of the eye at any given level of light adaptation is determined by the remaining number of unexcited neural elements. It may be expressed as a probability integral of $1/\Delta I$. Further data from a variety of sources are advanced to support this theory.—*D. E. Smith* (Alberta).

5328. Deutsch, F. The sense of reality in persons born blind. *J. Psychol.*, 1940, **10**, 121-140.—28 blind subjects were presented with 7 wooden blocks of different shapes and asked to arrange them in order of preference. Reactions to the removal of one or more blocks during the test were observed and recorded. "A striking readiness to give up reality and escape into fantasy is noticed."—*F. A. Mole, Jr.* (Connecticut).

5329. Drigalski, W. Experimenteller Vitamin A-Mangel am Menschen; zugleich ein Beitrag über den Wert der Adaptometrie. (Experimental vitamin A deficiency in man; a contribution to the value of adaptometry.) *Z. Vitaminforsch.*, 1939, **9**, 325-330.—(*Biol. Abstr.* XIV: 10132).

5330. Duggan, W. F. Tangent screen scotometry: value in diagnosis, prognosis and evaluation of therapy. *Arch. Ophthalm., Chicago*, 1940, **23**, 316-339.—Several cases are presented in which perimetric findings were normal but where tangent screen scotometry demonstrated the existence of small lesions and gave valuable clues in diagnosis.—*M. R. Stoll* (American Optical Company).

5331. Esclargon, E. La psychologie de l'audition. (Psychology of hearing.) *Rev. Acoust.*, 1939, **8**, 189-195.

5332. Fedorov, N. T. Some regularities underlying the effect of indirect stimuli (Nebenreiz) upon the discrimination sensitivity of the eye. *C. R. Acad. Sci. U. R. S. S.*, 1939, **22**, 70-74.—A mathematical analysis of the data of Kravkov and others shows that the change in threshold caused by the indirect stimulus (sound, odor, or the illumination of the other eye) is independent of the intensity of the direct stimulus. The amount of this change is determined solely by the intensity of the "indirect stimulus and the particular sensitivity of the brain,

increasing with the enhancement of both these factors."—*L. A. Riggs* (Vermont).

5333. **Fedorov, N. T.** *Theory of the eye's photometric sensitivity.* *C. R. Acad. Sci. U. R. S. S.*, 1939, 24, 696-699.—The theory is based upon (1) Cobb's hypothesis that a just perceptible difference in brightness implies the decomposition of a certain constant amount of a light-sensitive substance, (2) a monomolecular photochemical reaction, (3) a bimolecular reverse reaction, and (4) a visual cycle such as the one proposed by Wald. The theory is applied to measurements of the sensitivity of the cone receptors. It is also concluded that at a constant level of brightness the value of $\Delta I/I$ is independent of the wave length of the stimulating light.—*L. A. Riggs* (Vermont).

5334. **Fedorov, N. T., & Fedorova, V. I.** *On the number of light sensitive substances in the retina.* *C. R. Acad. Sci. U. R. S. S.*, 1939, 22, 75-80.—As a result of certain matching experiments involving comparisons of red, green, and blue lights the conclusion is reached that the "cones of the eye contain but one light sensitive substance" rather than three separate substances as is commonly assumed. It is proposed that an explanation for color discrimination should be sought for in nerve fiber connections between the retina and three different centers of the brain.—*L. A. Riggs* (Vermont).

5335. **Fedorov, N. T., & Fedorova, V. I.** *Instantaneous visual threshold after light adaptation.* *C. R. Acad. Sci. U. R. S. S.*, 1939, 24, 692-695.—The data of Blanchard on the instantaneous visual threshold after adaptation to lights of various wave lengths are analysed and are found to be consistent with the hypothesis that a bimolecular reaction is the restorative process occurring at the first instant after an adapting light is cut off. This initial process, according to Wald's schema, consists largely of the conversion of vitamin A into visual purple. Corrections have been made in accordance with Blanchard's data for pupillary area and with Stiles and Crawford's data for the differential effectiveness of rays falling at different distances from the center of the pupil.—*L. A. Riggs* (Vermont).

5336. **Fedorov, N. T., & Fedorova, V. I.** *Photometric sensitivity of the eye.* *C. R. Acad. Sci. U. R. S. S.*, 1939, 24, 700-703.—Formulae developed on the basis of the general theory described in a previous publication are shown to describe existing data for the relation of $\log \Delta I/I$ to $\log I$. They also apply to the data of Graham and Kemp for the relation between $\Delta I/I$ and the duration of exposure of ΔI . New data by Plakhov for the relation of $\log \Delta I/I$ to $\log I$ are described and are shown to be consistent with the theory.—*L. A. Riggs* (Vermont).

5337. **Fischer, F., & Gudden, B.** *Die Augenempfindlichkeit im Ultrarot.* (Visual sensitivity in infrared light.) *S. B. phys.-med. Soz. Erlangen*, 1939, 70, 378-384.—In agreement with Goodeve, the authors find that the human eye in light adaptation (so-called cone vision, which surpasses rod vision at 700 m μ and in which hue no longer changes,

from 700-900 m μ) can perceive wave lengths of 900 m μ . With an iris diameter of 6.7 mm. and the use of a wedge with India ink solution, the authors obtained a threshold value 25 times higher than Goodeve. While he concluded that the logarithms of threshold values are a linear function of the frequency, the present authors find that these logarithms are represented better as linear function of the wave length. They find thus a quicker decrease of visual sensitivity with increase in wave length.—*P. L. Krieger* (Leipzig).

5338. **Fitzgerald, O.** *Discharges from the sensory organs of the cat's vibrissae and the modification in their activity by ions.* *J. Physiol.*, 1940, 98, 163-178.—The normal sensory action of the vibrissae was studied by oscillograph records of afferent impulses in the maxillary nerve, the stimuli being traction, pressure, and solutions injected into the common carotid artery. The most effective stimulus is movement of the vibrissae in particular directions, downward being the most effective for the upper, and upward for the lower. The hairs are most sensitive to the particular stimulus which they will first meet from a moving object. Adaptation is slow, which is probably important in postural adjustment of the head to objects. Spontaneous discharges occur, which are apparently due to abnormal irritability associated with a stimulus just above the threshold. Na^+ in large, and K^+ in much smaller amounts, cause spontaneous discharges and an increased initial discharge. K^+ in large amounts depresses the spontaneous and the initial discharge and produces rapid adaptation. Citrate produces spontaneous discharge like K^+ . Ca^{++} inhibits spontaneous discharges, decreases initial response, and quickens adaptation. These results do not support the view that K^+ can be an agent producing rapid adaptation in these endings.—*M. E. Morse* (Baltimore).

5339. **Ford, A.** *The axis of head rotation in dynamic binaural localization.* *Psychol. Bull.*, 1940, 37, 528-529.—Abstract.

5340. **Fowler, E. P. Jr.** *Extraneous factors in quantitative tests of hearing.* *Acta Otolaryngol., Stockh.*, 1940, 28, 283-304.—Numerous measurements of the influence of relative quietness of the room, whispering versus talking, different types of testing instrument (voice, tuning fork whistle), etc. on the results of quantitative hearing tests were made on subjects with normal and diseased ears. It was noted that "whisper is less affected by extraneous sounds than is voice" and that the variation in the threshold of hearing from time to time is often greater in diseased ears than in normal ones. It is pointed out that one can avoid overvaluing chance differences in test results if one bears in mind that the intensity of sound decreases as the square of the distance.—*E. M. Pilpel* (New York City).

5341. **Fry, G. A.** *Significance of Betts tests of visual efficiency.* *Optom. Wkly.*, 1940, 31, 677-680.—A comparison of test scores for 89 grade school

students whose visual acuity was measured both by Betts telebinocular charts and by Snellen charts showed lower scores for the Betts charts; the lack of correlation between the two methods is attributed to the stimulation of accommodation and convergence in the telebinocular tests, and to difference in test pattern of the targets used for these tests.—*D. J. Shaad* (Los Angeles, Calif.).

5342. Goodfellow, L. D. Adaptation to sound distortion. *Psychol. Bull.*, 1940, 37, 528.—Abstract.

5343. Graham, C. H., & Bartlett, N. R. The relation of size of stimulus and intensity in the human eye: III. The influence of area on foveal intensity discrimination. *J. exp. Psychol.*, 1940, 27, 149-159.—Foveal intensity discrimination thresholds were determined with white light over a range of 4.6 log units of adapting intensity (*I*) and for circular areas varying in radius from 2-28 minutes of visual angle. With a constant area of stimulus surface, the ratio $\Delta I/I$ has a high value for low adapting intensities. As *I* increases, $\Delta I/I$ decreases and finally reaches a limiting value. At comparable levels of *I* the ratio $\Delta I/I$ is large for small areas and decreases as area increases. A combination of 2 hypotheses, one in terms of retinal photochemistry and the other in terms of visual spatial effects is offered.—*H. W. Karn* (Pittsburgh).

5344. Grether, W. F. The magnitude of simultaneous color and brightness contrast for chimpanzee. *Psychol. Bull.*, 1940, 37, 500-501.—Abstract.

5345. Hecht, S., & Pirenne, M. H. The sensitivity of the long-eared owl in the spectrum. *J. gen. Physiol.*, 1940, 23, 709-717.—Infrared radiation (750-1500 $m\mu$) produces no iris contraction in the long-eared owl, even when the energy content is millions of times greater than that of green light which easily elicits a pupil change. The energies in different parts of the visible spectrum required for a minimal iris response yield a spectral visibility curve for the owl which is the same as the human visibility curve at low light intensities. Functionally, the owl's vision thus corresponds to the predominantly rod structure of its retina, and the idea that nocturnal owls have a special type of vision sensitive to infrared radiation for seeing in the woods at night is erroneous.—*M. E. Morse* (Baltimore).

5346. Heiser, F. Cutaneous temperature adaptation. *Psychol. Bull.*, 1940, 37, 526.—Abstract.

5347. Hermans, T. G. The perception of size in binocular, monocular and pin-hole vision. *J. exp. Psychol.*, 1940, 27, 203-207.—100 subjects observed a standard 100 mm. square with pin-hole, monocular, and binocular vision. The subjects recorded their estimates of the size of the standard under the 3 conditions by regulating an aperture and the average subjective equations obtained were for: (1) binocular 104.76 mm, (2) monocular 93.7 mm, and (3) pin-hole vision 67.25 mm. The importance of muscular factors in the determination of the results is discussed.—*H. W. Karn* (Pittsburgh).

5348. Herring, P. T. The problem of pain. *Nature, Lond.*, 1939, 144, 770-772.—The physiology

of pain presents many unsolved problems, such as the nature of the process by which pain is produced, the problem of the persistence of sensations of pain, the nature of the afferent fibres which convey the pain impulses to the central nervous system, the termination of such fibres, the problem of visceral pain, of headaches, and of the relief of pain.—*G. F. J. Lehner* (Miami).

5349. Jenkins, W. L. The relation of cutaneous cold and warm. *Psychol. Bull.*, 1940, 37, 527.—Abstract.

5350. Kahmann, H. Von der Leistung des Jacobsohnschen Organs bei den Wirbeltieren. (The operation of Jacobsohn's organ in vertebrates.) *Ergebn. Biol.*, 1939, 16, 292-335.—The survey is restricted to the arrangements in mammals and reptiles. In the latter the Jacobsohn's organ is to be characterized as an organ of temperature and an oral organ of smell. The author also establishes the relations of Jacobsohn's organ to other sense organs and to the life habits of the animals in question.—*P. L. Krieger* (Leipzig).

5351. Kravkov, S. V. Critical frequency of flicker and indirect stimuli. *C. R. Acad. Sci. U. R. S. S.*, 1939, 22, 64-66.—7 subjects were stimulated by the odor of oil of Bergamot or by an intense sound during the process of dark adaptation to red or green light. The odor or sound under some conditions increased the critical frequency of flicker and diminished the color threshold; under other conditions the opposite effects were observed. It was therefore concluded that the effects of these indirect stimuli were not equivalent to changes in the objective intensity of the observed light.—*L. A. Riggs* (Vermont).

5352. Kravkov, S. V. On some correlations of different receptors in our color vision. *C. R. Acad. Sci. U. R. S. S.*, 1939, 22, 67-69.—Indirect stimuli (odor or sound) are effective in increasing the sensitivity of the eye to lights which stimulate the green sensitive receptors of the retina. This enhancement does not apply to lights stimulating the red or blue sensitive receptors, but it may under certain conditions act to produce an indirect depression of sensitivity in the red sensitive receptors.—*L. A. Riggs* (Vermont).

5353. Kuroki, S., & Horie, S. [Vowel perception by the deaf child with residue of hearing.] *Jap. J. Psychol.*, 1940, 15, 115-120.—*R. Kuroda* (Keijo).

5354. Lancaster, J. E. The orthoptic technician as an aid to the ophthalmologist. *Arch. Ophthalm., Chicago*, 1940, 23, 560-563.—This is a brief discussion of orthoptic procedures. Patients fall into 2 groups, those for whom no operative interference seems necessary, and those sent in for pre- and post-operative training. Sufficient acuity to see the targets must first be developed by office training and home exercises. Anomalous correspondence requires usually 10 to 20 lessons to correct. Fusion training can be started when normal correspondence is developed. Development of fusion amplitude

and depth perception are undertaken through both office and home training. Accommodative squints especially in young children may be cured in 4-8 months, convergence insufficiencies in 2-6 weeks.—*M. R. Stoll* (American Optical Company).

5355. Lauer, A. R. The relation between visual acuity, illumination of test object, and strength of opposing lights. *Psychol. Bull.*, 1940, 37, 482-483.—Abstract.

5356. Lewis, J. M., & Haig, C. Vitamin A requirements in infancy as determined by dark adaptation. *J. Pediat.*, 1939, 15, 812-823.—53 infants, aged 1.5 to 13 months, were grouped according to 4 vitamin A diets: average diet, high vitamin A diet, 25% of the average, and 8 1/3% of the average. After 3-10 months dark adaptation tests revealed normal threshold values for all four groups. No group was handicapped regarding weight or susceptibility to infections. Results indicate that approximately 25 units of vitamin A per kilogram of body weight is the minimum requirement.—*E. Green* (Bradley Home).

5357. Lewis, J. M., & Haig, C. Vitamin A status of children as determined by dark adaptation. *J. Pediat.*, 1940, 16, 285-295.—144 children, aged 6-12, private and ward patients at Bellevue Hospital, were examined for evidences of vitamin A deficiency. Dark adaptation tests revealed normal threshold values in all but one case, that of a child who had been on a strict diet which was low in vitamin A. A large dose of the vitamin restored the threshold to normal in 35 minutes. After 20 days when the threshold had again reached a high level, the provitamin, carotene, reduced it to normal. When the child was returned to a normal diet, the threshold persistently tested normal.—*E. Green* (Bradley Home).

5358. Luckiesh, M., & Moss, F. K. New methods of subjective refraction involving identical technics in static and in dynamic tests. *Arch. Ophthalm.*, Chicago, 1940, 23, 941-957.—The authors describe the sensitometric method of refraction in which object size is constant and visibility is varied by changing brightness and contrast with gradient filters placed before the eyes. By this technic all stimulation to accommodation is avoided as indicated by the symmetric blurring with plus and minus lenses of equal power.—*M. R. Stoll* (American Optical Company).

5359. Ludvigh, E. Determination and significance of the photopic retinal visibility curve. *Arch. Ophthalm.*, Chicago, 1940, 24, 168-181.—A photopic visibility curve is corrected for absorption and reflection of light by the ocular media, and is thus translated into a photopic retinal visibility curve. A smooth, symmetric curve results which does not correspond to the absorption spectrum of any known photosensitive substance. Various possible explanations of these facts are discussed.—*M. R. Stoll* (American Optical Co.).

5360. Malmö, R. B. Effects of removal of the visual cortex on brightness discrimination and spectral brightness distribution in the Rhesus monkey. *Psychol. Bull.*, 1940, 37, 497-498.—Abstract.

5361. Manz, R. Der Einfluss geringer Alkoholgaben auf Teilfunktionen von Auge und Ohr. (The effect of small quantities of alcohol on part functions of the eye and ear.) *Dtsch. Z. ges. gerichtl. Med.*, 1940, 32, 301-312.—The course of dark adaptation in the human eye remains unchanged even with considerable quantities of alcohol in the blood, whereas depth perception is definitely affected even after small quantities. Disturbances of the equilibrium apparatus in the direction of increased irritability appear already when the blood concentration of alcohol reaches 0.0003-0.0004. With such low concentrations some of the cases show spontaneous nystagmus.—*P. L. Krieger* (Leipzig).

5362. Masui, Y. [The effect of secondary stimuli upon the perception of lengths in visual space.] *Jap. J. Psychol.*, 1940, 15, 79-86.—The 2 vertical dotted lines in Ponzo's figure which are interposed between two sides of an angle were drawn with continuous lines, and the effect of the 2 converging sides upon estimation of their relative lengths was experimentally studied. Confirming Ponzo's results with dotted lines, the continuous line nearer to the angle point was generally seen as longer than the one further away. As the magnitude of the angle decreases the illusion increases. The illusion is prone to decrease gradually with the progress of experimentation. Individual differences are relatively great when the angle is exceedingly great or exceedingly small, and are smallest between 45° and 75°.—*R. Kuroda* (Keijo).

5363. McDonald, R. Some basic principles of dark adaptation. *Arch. Ophthalm.*, Chicago, 1940, 23, 841-851.—This is a critical review of the more significant data concerning dark adaptation and correlation of the process with the known facts concerning bleaching and regeneration of visual purple. In conclusion it is pointed out that the value of the dark adaptation test as a routine test for vitamin A deficiency can be determined only after critical consideration of the related physiological facts and analysis of the results.—*M. R. Stoll* (American Optical Company).

5364. Mead, L. C. Visual brightness discrimination in the cat as a function of illumination. *Psychol. Bull.*, 1940, 37, 501-502.—Abstract.

5365. Meyer, W. A. Measurement of the angle of squint by means of the ophthalmograph. *Amer. J. Optom.*, 1940, 17, 250-252.—Satisfactory measures of squint in alternating strabismus can be made with the ophthalmograph. The film is started with both eyes exposed, and then the fixing eye is occluded. The speed and extent of the excursion of the other eye as it assumes fixation is accurately indicated. Frequently results are in disagreement with those indicated by the dissociating prism method of measurement; the latter apparently encourages

greater deviations than those habitually permitted.—*M. R. Stoll* (American Optical Company).

5366. **Molitor, A.** *Zum Farbensinn der Faltenwespen.* (The color sense of wrinkled wasps.) *Zool. Anz.*, 1939, 126, 259-264.—In a nest of *vespa vulgaris* on the ground, the hole was stopped up and made unrecognizable. Nearby 3 similar shallow holes were made and backed with black, blue, and red paper disks. The wasps returning from flight entered these false holes without first seeking the closed entrance. The black hole was plainly preferred to the blue and markedly to the red. The red hole could not resemble the black. In similar experiments the flight hole of a nest on a wall was covered with perforated colored cardboard. Here too the black lure was preferred to the colored. Red blindness could thus not be established in these experiments.—*P. L. Krieger* (Leipzig).

5367. **Murray, E.** The use of Munsell papers in tests diagnostic of color weakness, color blindness, and vocational color capacity. *Amer. J. Psychol.*, 1940, 53, 445-449.—*D. E. Johannsen* (Skidmore).

5368. **Neff, W. D.** An experimental investigation of hearing following partial section of the eighth nerve. *Psychol. Bull.*, 1940, 37, 527-528.

5369. **Newhall, S. M.** Measurement of simultaneous contrast. *Psychol. Bull.*, 1940, 37, 500.—Abstract.

5370. **Niemoeller, A. F.** *Complete guide for the deafened.* New York: Harvest House, 1940. Pp. 256. \$3.00.—The topics considered in this book may be grouped as follows: statistics on frequency of hard of hearing; physiology and anatomy of the ear; types of deafness; causes of impaired hearing; prevention of impaired hearing; symptoms of auditory disorders; hearing tests; re-education; re-educational aids, individual and social; organizations for the aid of the hard-of-hearing; and socioeconomic problems of the hard-of-hearing.—*R. Y. Walker* (Ohio State).

5371. **Niemoeller, A. F.** *Handbook of hearing aids.* New York: Harvest House, 1940. Pp. 156. \$3.00.—This book lists the majority of hearing aids, and their manufacturers, which are available for the hard-of-hearing. The author classifies the various instruments according to type, gives some advice for the selection of the correct type, lists prices, and evaluates the efficacy of different hearing aids. The author approves of certain types and comments on the inadequacy of others.—*R. Y. Walker* (Ohio State).

5372. **Ogle, K. N.** Induced size effect with the eyes in asymmetric convergence. *Arch. Ophthalm.*, Chicago, 1940, 23, 1023-1038.—A size lens, magnifying only in the vertical, causes a surface, parallel to the frontal plane, to seem nearer on the side wearing the lens. Neither geometry nor theories of depth perception afford any explanation for this effect, which reaches a maximum on either side of the point of zero size difference and then decreases. A series of investigations established the fact that

the centers of symmetry of the resultant curves showed consistent shifts in the vertical when various meridional and overall size lenses were worn. These changes are interpreted as providing further evidence, in addition to that reported in earlier papers, that "a change in the relative functional sizes of the ocular images of the two eyes occurs in the vertical meridian when the eyes are turned in asymmetric convergence and that in general this change is of an amount which offsets the difference in the distance of the observed object from the two eyes."—*M. R. Stoll* (American Optical Company).

5373. **Park, G. E., & Park, R. S.** Further evidence of change in position of the eyeball during fixation. *Arch. Ophthalm.*, Chicago, 1940, 23, 1216-1230.—The authors review some of their earlier conclusions: that the center of rotation of the eye is not fixed; that the visual axis and optic axis intersect at an angle which varies except for aphakic patients; and that changes in position of the globe relative to the fixation point are compensated by changes in the shape and curvature of the lens effected through the ciliary muscles. The present study concerns eye excursions made during reading, and studied by means of ophthalmographic records. Additional lights were put on the instrument and only the lower halves of correcting lenses were worn to eliminate effects of refraction on the incident and recorded beam. Correction factors were calculated for the changes in excursion resulting from the prismatic effects of the lenses. Differences in range of movement were of the order anticipated: myopic eyes moved approximately 5-5.5 mm.; aphakic eyes, 10.5-11 mm. But, the authors conclude, no mathematical treatment of the problem of muscular adjustments can be adequate, since there exist no fixed values in the mathematical sense and since both skeletal and autonomic nervous impulses appear to contribute to the essentially complex process.—*M. R. Stoll* (American Optical Company).

5374. **Pett, L. B., & LePage, G. A.** Vitamin A deficiency. III. Blood analysis correlated with a visual test. *J. biol. Chem.*, 1940, 132, 585-593.—(*Biol. Abstr.* XIV: 10036).

5375. **Philip, B. R.** Intra-serial effects in the discrimination of color mass by the ranking method. *J. exp. Psychol.*, 1940, 27, 125-135.—"Daily for 25 days thirty-two women ranked for color mass six different color combinations, twelve stimuli to a set. From scoring methods based upon errors and allocation to serial position the following conclusions were reached: (1) Inter-test correlations and reliabilities are high. (2) Color combinations differ in difficulty. (3) The curve of serial difficulty of the stimuli is double concave, in opposition to Weber's Law. (4) An explanation for this finding is advanced, based upon frames of reference at the limiting stimuli."—*H. W. Karn* (Pittsburgh).

5376. **Pisa, A.** *Über den binocularen Gesichtsraum bei Haustieren.* (The binocular visual field in domestic animals.) *v. Graefes Arch. Ophthalm.*, 1939, 140, 1-54.—The extent of the useful visual

field in the median plane are given in degrees: for the rabbit 174, guinea pig 160, setter 120, English greyhound 119, foxterrier 127, goat 128, cattle 145, horse 118, foal 135.—P. L. Krieger (Leipzig).

5377. Pointer, R. *Der geschlechtsgebundene Erbgang mit besonderer Berücksichtigung der Rotgrünblindheit und der Hämophilie*. (Sex-linked heredity with regard especially to red-green blindness and hemophilia.) *Wien. klin. Wschr.*, 1939, 52, 730-734.—P. L. Krieger (Leipzig).

5378. Rawdon-Smith, A. F., & Hawkins, J. A., Jr. The electrical activity of a denervated ear. *Proc. R. Soc. Med.*, 1939, 32, 496-511.—The auditory nerve of a cat was crushed intracranially, thus rendering the animal deaf in one ear. Five weeks later, the cochlear response of this ear was normal despite the absence of functional nervous elements. It is pointed out that it is impossible to use the cochlear response as an index of an animal's auditory acuity.—W. J. Brogden (Wisconsin).

5379. Riggs, L. A. Recovery from the discharge of an impulse in a sensory end-organ. *Psychol. Bull.*, 1940, 37, 499.—Abstract.

5380. Rosenberg, L. D., & Slavinsky, A. B. Measurements of the directional properties of the ear carried out with a dummy. *C. R. Acad. Sci. U. R. S. S.*, 1940, 26, 578-580.—Two microphones were mounted within a dummy head in positions corresponding to a person's eardrums. An amplifier for each microphone was also placed within the head. The output of each amplifier was measured in such a way that the effectiveness of sound upon it might be stated in decibel units. A dynamic speaker served as a source of sounds ranging from 300 to 2200 cycles. The speaker was moved about the head in the three principal planes of space, and the resulting magnitude of effect upon each microphone was measured for each position. Curves expressing the results for the horizontal plane agree for the most part with those of previous investigators. New curves were derived for the other two planes.—L. A. Riggs (Vermont).

5381. Seitz, C. P., & Rosenthal, C. M. The effect of oxygen deprivation and strychnine on the relative blind areas of the eye. *Psychol. Bull.*, 1940, 37, 462.—Abstract.

5382. Stevens, S. S., & Volkman, J. The relation of pitch to frequency: a revised scale. *Amer. J. Psychol.*, 1940, 53, 329-353.—The purpose of the present study was to determine the functional relationship between pitch and frequency, so that pitch, as a perceived aspect of the tone, could be measured. It was desired that the scale set up be an extensive one, i.e., "one to which numerals are assigned in such a way that the positional relations among the numerals in the numeral-series are reflected in perceived relations among the pitches." Two methods (equal sense-distances and fractionation) were used to determine such a scale and they gave very good agreement. The scale unit derived is called a *mel* and is defined as 1/1000th of the pitch of a tone of 1000 d.v./s. It was found that in terms

of the pitch-scale, octaves and fifths become subjectively larger as frequency increases (up to 4 octaves above middle C). A comparison of the pitch-scale and the function relating tonal frequency and the region stimulated in the basilar membrane shows good agreement. On the basis of the pitch-scale, it appears that all j.n.d.'s for pitch are subjectively equal. These data are considered theoretically.—D. E. Johannsen (Skidmore).

5383. Stoddard, K. B. Aniseikonia. *Amer. J. Optom.*, 1940, 17, 253-266.—A general review of the problem of aniseikonia is given from its early recognition through recent discoveries of various curious aspects of the problem. Development of corrective procedures is discussed with introduction of a few case histories to illustrate their application. An instrument to facilitate preliminary diagnosis of aniseikonia is regarded as a present need.—M. R. Stoll (American Optical Company).

5384. Taylor, F. V. Change in size of the after-image induced in total darkness. *Psychol. Bull.*, 1940, 37, 501.—Abstract.

5385. Volkman, J. A test of a quantum theory of differential sensitivity. *Psychol. Bull.*, 1940, 37, 499-500.—Abstract.

5386. Walls, G. L. Postscript on image expansion by the foveal clivus. *Arch. Ophthalmol.*, Chicago, 1940, 23, 831-832.—Data from a paper published by Valentin in 1879, seem to support the theory, proposed by the author in an earlier paper, that difference in the refractive indices of the vitreous and retina might give rise to an effect of high magnification in the region of the foveal slopes. The figures reported by Valentin for a species of parrot indicate an areal expansion of approximately 30% when applied to a fovea of the sort found in the hawk. The much shallower fovea of man, together with the lower retinal index indicated for him, suggest that the human fovea has degenerated from an originally much more abrupt depression.—M. R. Stoll (American Optical Company).

5387. Warren, N. A comparison of standard tests of depth perception. *Amer. J. Optom.*, 1940, 17, 208-211.—The depth perception of 61 students was measured with the Howard-Dolman apparatus and with the Keystone stereoscopic test. The reliability for each test was: .93 for the Howard-Dolman and .86 for the Keystone test; but the correlation between the 2 tests was only .119. Obviously the 2 measures are not equivalent. Various differences in the objective situations of the 2 tests are seen as factors contributing to the differences in results. It is apparent that any evaluation of the 2 tests must take into account the particular purpose for which the test is used.—M. R. Stoll (American Optical Company).

5388. Weber, H. H. *Über die allgemeinere psychologische Bedeutung des Totalitätsgesetzes Goethes, insbesondere für die Tonpsychologie*. (The more general psychological meaning of Goethe's law of totality, especially for the psychology of sound.) *Forsch. Fortschr.*, 1940, 16, 146.—In color

vision the scale of all possible color sensations is comprised within somewhat less than one octave. This represents an important instance of minimal extension in the field of sensory psychology. The acoustic field, which takes in 11 octaves, represents the opposite situation. Even here, however, the quintessence of the whole sensory extension is contained within one octave. The basic chord (c-major-chord), whether intoned with c-e-g or C₁-e-g₁, represents the totality of the entire capacity of sound sensitivity.—P. L. Krieger (Leipzig).

5389. Weizsäcker, V. v. **Funktionswandel der Sinne.** (Changes in function of the senses.) *Ber. phys.-med. Ges. Würzburg*, 1939, 62, 204-219.—The author discusses the bases of changed sensory activity in cases of pathological changes of the central nervous system. The disturbances manifest themselves chiefly in a lability of the threshold, especially of the pressure sense. In most cases one may speak of a change of function. Agnosias and ataxias of touch are dealt with, also reactions to objects in the optic and haptic fields.—P. L. Krieger (Leipzig).

5390. Werner, H. **Studies on contour: stroboscopic phenomena.** *Amer. J. Psychol.*, 1940, 53, 418-422.—"A black disk and a black ring of the same inner diameter as the disk are projected stroboscopically, one to the left and one to the right eye. At an optimum rate of succession the disk disappears. This experimental observation supports the view that the phenomenon of depression or inhibition described in the first study on contour, does not originate at the retinal level but is the result of a perceptual process at a higher level of integration."—D. E. Johanssen (Skidmore).

5391. Wever, E. G., Bray, C. W., & Lawrence, M. **Quantitative study of combination tones.** *Psychol. Bull.*, 1940, 37, 526-527.—Abstract.

[See also abstracts 5271, 5297, 5304, 5307, 5308, 5437, 5452, 5529, 5604, 5608, 5682, 5683, 5710.]

LEARNING, CONDITIONING, INTELLIGENCE

(Incl. Attention, Thought)

5392. Adkins, D. C. **The relation of primary mental abilities to preference scales and to vocational choice.** *Psychol. Bull.*, 1940, 37, 456-457.—Abstract.

5393. Babcock, H. **The level-efficiency theory of intelligence.** *Psychol. Bull.*, 1940, 37, 445.—Abstract.

5394. Brogden, W. J. **The effect of change in time of reinforcement in the maintenance of conditioned flexion responses in dogs.** *Psychol. Bull.*, 1940, 37, 477-478.—Abstract.

5395. Brown, A. W., & Cotton, C. B. **The influence of deteriorated urban areas on the intelligence test responses of Italian and Polish children.** *Psychol. Bull.*, 1940, 37, 521-522.—Abstract.

5396. Buegel, H. F. **The effects of introducing ideational elements in perceptual-motor learning.** *J. exp. Psychol.*, 1940, 27, 111-124.—In this study the subjects learned to light a series of 12 lights when the lights were presented with (1) no extraneous ideational elements; (2) with digits, 1 2 3 4 5 6; (3) with related letters, A B C D E F; and (4) with unrelated letters, B Q R F L Z. It was found that the introduction of ideational contexts in the learning of a patterned motor performance results in a distinct advantage at least during the initial stages of the learning process. Of the ideational contexts, the digits show the greatest advantage. The unrelated letters show an advantage nearly equal to that of digits. Related letters show an advantage over the non-ideational situation, but not as great as that of the digits or unrelated letters.—H. W. Karn (Pittsburgh).

5397. Bumstead, A. P. **Distribution of effort in memorizing prose and poetry.** *Amer. J. Psychol.*, 1940, 53, 423-427.—"Between 1915 and 1939 the writer memorized about 3000 lines from *Paradise Lost* and the *Bible*. The selections ranged in length from 1 line to 1200 lines; the intervals between single readings varied from 0 to 8 days; the study-periods ranged in length from a few seconds to 35 min.; memorizing was by wholes, by parts learned consecutively, and by parts learned concurrently. He arrived at the following conclusions. . . . (1) The longer the interval between readings, the shorter the study-time and the longer the elapsed-time. (2) When a passage is divided into parts which are learned consecutively, the smaller the parts the shorter the study-time and the longer the elapsed-time. (3) When a passage is divided into parts which are learned concurrently, the smaller the parts the shorter the study-time and the shorter the elapsed-time."—D. E. Johanssen (Skidmore).

5398. Burnham, R. W. **Removal of the thyroid and pituitary glands as related to learning in the rat.** *Psychol. Bull.*, 1940, 37, 465.—Abstract.

5399. Buxton, C. E. **Latent learning and the goal gradient hypothesis.** *Contr. psychol. Theor.*, 1940, 2, No. 2. Pp. x + 75.—"Rats lived in a complex T-maze without food or water for varying numbers of nights. On a chosen day they were taken directly from the living cages, in which they spent all the time they were not in the maze, to the food box, to find food in it for the first time. They were then carried to the starting box, released, and observed on their very first run to food. They showed: (1) reliable evidence of latent learning, making a relatively small number of errors; (2) a speed of locomotion gradient . . . ; (3) a backward order of difficulty of blinds. . . . A field-theoretical interpretation has been attempted for these and other less outstanding events."—D. M. Purdy (Mills).

5400. Crannell, C. W. **Alternative interpretations of results obtained on a variation of the Peterson mental maze.** *Amer. J. Psychol.*, 1940, 53, 428-431.—The author points out that whether responses in a learning situation are good or bad is a function of E's definition of success. College students were

required to learn 2 alternative forms of Peterson's mental maze. 10 pairs of letters were used; in Form I the first letter was correct, in Form II the second. The two forms were learned simultaneously by forcing S to return to the beginning of the alternate form whenever he made a mistake. Whenever one maze was correctly completed the return was to the start of the alternate form. The criterion of learning was an errorless performance on 3 successive trials. Useable records were obtained from 21 S's, who were divided into two groups: (1) insightful S's, who correctly gave the response to the alternate form when they completed their first correct trial, and (2) insightful S's, who gave the letter correct for the maze they had just finished. It was found that insightful S's spent much time progressing along the first maze but made few repetitive errors whereas insightful S's spent little time in progressing along the alternate maze, but made more repetitive errors. The insightful S's reached the first criterion run in 174.6 trials, the insightful S's in 207.7 trials, but it took the insightful S's 164.9 trials to reach the first errorless run, the insightful S's 97.1 trials. The author concludes, "It would seem that not only the development of apparatus and procedure, but also the criterion of success—and therefore, to a great extent, the results of many learning experiments,—may be dependent upon the theoretical bias and evaluative concepts of E."—D. E. Johanssen (Skidmore).

5401. Crutchfield, R. S. Inhibitory effects in partial review. *Psychol. Bull.*, 1940, 37, 489.—Abstract.

5402. Doll, E. A. I.Q. and mental deficiency. *J. consult. Psychol.*, 1940, 4, 53-61.—The misuse and misinterpretation of the I.Q. are discussed. "Misuse of mental tests is not only a menace to clinical psychology and to the welfare of exceptional children but to the tests themselves which tend to be discredited when overworked."—P. S. de Q. Cabot (Simmons).

5403. Earl, C. J. C. A psychograph for morons. *J. abnorm. soc. Psychol.*, 1940, 35, 428-448.—A battery of two verbal and two performance tests for adult morons is described. The scores are expressed in graphic form, and certain types of curves are found to be highly accurate in the prognosis of social adaptability. Curves which are unbiased indicate the best social prognosis; next come curves biased in favor of performance; irregular curves and those biased in favor of verbal tests are of bad prognostic import. The dispersion of abilities shown by the subjects is believed to be due mainly to affective factors. The principal non-cognitive processes affecting the various tests are discussed.—C. H. Johnson (Portland, Ore.).

5404. Fryer, D. Articulation in automatic mental work. *Psychol. Bull.*, 1940, 37, 469-470.—Abstract.

5405. Gagné, R. M. The effect of interval between trials on the rate of acquisition and extinction of a conditioned operant response. *Psychol. Bull.*, 1940, 37, 477.—Abstract.

5406. Goodenough, F. L. Intelligence and month of birth. *Psychol. Bull.*, 1940, 37, 442.—Abstract.

5407. Grant, D. A., & Hilgard, E. R. Sensitization as a supplement to association in eyelid conditioning. *Psychol. Bull.*, 1940, 37, 478-479.—Abstract.

5408. Gregg, F. M. Overcoming geographic disorientation. *J. consult. Psychol.*, 1940, 4, 66-68.—Successful re-education of subjects who were geographically disoriented is reported, and a set of directions for establishing orientation habits given. The time taken by about 50 subjects to be "squared with the world" varied from 1-14 days.—P. S. de Q. Cabot (Simmons).

5409. Hildreth, G. Bilateral figure-drawing in relation to age, mental maturity, eye and hand preference. *Psychol. Bull.*, 1940, 37, 521.—Abstract.

5410. Hoffmann, H. F. Erbpsychologie der Höchstbegabungen. (Heredity psychology of genius) *Handb. Erbbiol.*, 1939, 5, Pt. I, 669-696.—Highest aptitude is not based on specific aptitude but on a creative personality. Talent and intelligence are by themselves no guaranty for creative qualities. Peculiarities of vitality and the emotional and conative life are equally important. Thus character virtues, good integration, and strength are usually combined in creative personalities with differentiation, sensitivity and fine feeling. Hereditary familial characteristics of endowment are often only the basic material for, not the origin of, the creative personality. Although geniuses usually have few and undistinguished descendants, it would be false to speak of lack of vitality and bionegativism. Such men follow laws of their own.—P. L. Krieger (Leipzig).

5411. Hull, C. L. Explorations in the patterning of stimuli conditioned to the G. S. R. *J. exp. Psychol.*, 1940, 27, 95-110.—An explorational investigation of the process of patterning stimuli conditioned to the galvanic skin reaction in man was carried out in 5 experiments with 40 subjects. The main findings are: (1) The incidence of patterning of the galvanic skin reaction in man which results from specific Pavlovian differential reinforcement is small. (2) An index of patterning, based on the ratio of the arithmetical sum of the amplitude of the reaction to 2 separately presented stimulus elements, to the amplitude of the reaction to their simultaneous presentation, is unstable. A possible means of correcting for the distortion of the index employed is suggested.—H. W. Karn (Pittsburgh).

5412. Humphreys, L. G., Miller, J., & Ellson, D. G. The effect of the inter-trial interval on the acquisition, extinction, and recovery of verbal expectations. *J. exp. Psychol.*, 1940, 27, 195-202.—Verbal expectations were studied on 3 groups of subjects under the following conditions: Group 1: 24 acquisition, 24 extinction, and 20 2nd extinction trials were given at 5-second intervals, with $\frac{1}{4}$ hour recovery period between the 1st and 2nd extinction. Group 2: conditions were the same, except that trials occurred

at 10-second intervals and the recovery period was 4 minutes. Group 3: 24 acquisition and 15 extinction trials were given at 20-second intervals, without a recovery test. It was found that within the time limits employed (1) spaced practice is of no advantage in either acquisition or extinction of verbal expectations, (2) spontaneous recovery of verbal expectations occurs, but no evidence of progressive recovery is obtained. It is suggested that, in conditioning experiments the progressive character of spontaneous recovery and the beneficial effects of spaced practice are due to decremental rather than expectancy factors.—*H. W. Karn* (Pittsburgh).

5413. Husband, R. W. **Relearning vs. positive transfer.** *Psychol. Bull.*, 1940, 37, 491-492.—Abstract.

5414. Ingham, S. D. **Orientation.** *Bull. Los Angeles neurol. Soc.*, 1940, 5, 95-106.—Orientation is "a state of psychological preparedness for the next act." Factors involved in orientation include: (1) consciousness, alertness of attention, instinctive motivation; (2) appreciation of time; (3) comprehension of the physical, tri-dimensional environment; (4) concept of the body-scheme; (5) familiarity with society and social relations; (6) possession of a personal philosophy; (7) synthesis of all factors in a situation into a concept of its significance. The first 4 factors are discussed and inferential relationships established between these processes and the function of various brain parts.—*D. K. Spelt* (Mississippi).

5415. Jenkins, J. G., & Sparks, W. M. **Retroactive inhibition in foreign language study.** *Psychol. Bull.*, 1940, 37, 470.—Abstract.

5416. Jones, V. **Negative transfer attending confusion of methods.** *Psychol. Bull.*, 1940, 37, 490.—Abstract.

5417. Katona, G. **On the relation between applicability of knowledge and methods of learning.** *Psychol. Bull.*, 1940, 37, 490-491.—Abstract.

5418. Kelley, T. L. **Mental factors as a function of personal idiosyncrasy and particularity of social demands.** *Psychol. Bull.*, 1940, 37, 445-446.—Abstract.

5419. Lanier, L. H. **Memory for words differing in affective value.** *Psychol. Bull.*, 1940, 37, 492-493.—Abstract.

5420. Layman, J. W. **I.Q. changes in older-age children placed for foster-home care.** *Psychol. Bull.*, 1940, 37, 443.—Abstract.

5421. Leuba, C. **The use of hypnosis to control variables in psychological experiments.** *Psychol. Bull.*, 1940, 37, 480-481.—Abstract.

5422. McCulloch, T. L. **An experimental study of factors influencing memory in mental defectives.** *Psychol. Bull.*, 1940, 37, 439-440.—Abstract.

5423. McGeoch, J. A. **Recall without overt learning.** *Psychol. Bull.*, 1940, 37, 493.—Abstract.

5424. McQuitty, L. L. **The growth and age-group ranges of intelligence, Part I.** *Psychol. Bull.*, 1940, 37, 443-444.—Abstract.

5425. Melton, A. W. **Retention of serial lists of adjectives over short-time intervals.** *Psychol. Bull.*, 1940, 37, 493-494.—Abstract.

5426. Moffie, D. J. **A nonverbal approach to the Thurstone primary mental abilities.** *Psychol. Bull.*, 1940, 37, 446-447.—Abstract.

5427. O'Kelly, L. I., & Steckle, L. C. **The forgetting of pleasant and unpleasant experiences.** *Amer. J. Psychol.*, 1940, 53, 432-434.—96 college students were asked on the first day of classes to recall the events of the Christmas vacation, labelling them *P* or *U*. 10 weeks later they were required again to recall these events. On the second recall 48% of the originally recalled *P* and 40% of the originally recalled *U* events were recalled. Comparison with data from other studies indicates that the relative amount of *P* and *U* events recalled tend to approach each other with time, though the difference after 10 weeks is still statistically reliable. The responses were bimodally distributed; there were optimists who forgot *P* and *U* experiences about equally, and pessimists who forgot *P* experiences significantly more rapidly; but correlations between Bernreuter Test scores and number of *P* and *U* events recalled ranged from $-.01$ to $-.27$.—*D. E. Johannsen* (Skidmore).

5428. Razran, G. H. S. **Conditioned response changes in rating and appraising sociopolitical slogans.** *Psychol. Bull.*, 1940, 37, 481.—Abstract.

5429. Richards, T. W. **Individual variations in I.Q. and analysis of concomitant factors.** *Psychol. Bull.*, 1940, 37, 442-443.—Abstract.

5430. Riesen, A. H. **Delayed response in chimpanzees by a color-matching technique.** *Psychol. Bull.*, 1940, 37, 502.—Abstract.

5431. Sears, R. R. **Recall of free associations to anxiety-inducing phrases.** *Psychol. Bull.*, 1940, 37, 505.—Abstract.

5432. Tingley, E. M. **Base eight arithmetic and money.** *Sch. Sci. Math.*, 1940, June, 503-508.—The number 8 is proposed to supplant 10 and 12 as the base for arithmetic on the grounds that people prefer halves to odd divisions. They like halves of things because they are closely related to halves through the symmetrical organization of their bodies.—*N. R. Bartlett* (Brown).

5433. Waters, R. H. **On the interpretation of absolute retention values.** *Psychol. Bull.*, 1940, 37, 491.—Abstract.

5434. Wechsler, D. **Nonintellective factors in general intelligence.** *Psychol. Bull.*, 1940, 37, 444-445.—Abstract.

5435. Wedell, C. H., & Skolnick, A. **An attempt to condition the pupillary response.** *Psychol. Bull.*, 1940, 37, 479.—Abstract.

5436. Wickens, D. D., & Biel, W. C. **The effects of vitamin B₁ deficiency on the conditioning of eyelid responses in the rat.** *Psychol. Bull.*, 1940, 37, 478.—Abstract.

5437. Winslow, C. N. Configural conditioning in the cat with auditory patterns of stimuli. *Psychol. Bull.*, 1940, 37, 479-480.—Abstract.

5438. Wolf, I. S., & Kellogg, W. N. Changes in general behavior during flexion conditioning and their importance for the learning process. *Amer. J. Psychol.*, 1940, 53, 384-396.—"This experiment represents an attempt to get at the genesis of the process of conditioning in a measurable or quantitative way. The flexion CR of the right hind foot of dogs was the response conditioned, but kymographic records were made of the reactions of all four feet and of the respiration throughout the entire experiment. By this method a better picture of the general behavior of the organism was obtained than is possible when records are taken from the conditioned member alone. Six unselected mongrel dogs were used as S's. Five of them received 400 conditioning trials, and the sixth 200. The conditioned stimulus was a 1000~ buzz, 50-55 db. above the human threshold, which was sounded for 2 sec. The unconditioned stimulus was a D.C. shock of 0.2 sec. duration, delivered to the right rear foot at the termination of the buzz. A CR was credited to any limb which was lifted during the period of the conditioned stimulus." Results show that the dogs reacted with all four feet at some time during the training, the frequency of response of the non-shocked feet decreasing and of the shocked foot increasing with training. Limbs anatomically closer to the point of stimulation reacted more frequently than those farther away. On the basis of their initial reactions the animals were divided into excitable and quiet types, the former reacting in all 4 feet almost 100% from the start of the training, the latter making few responses at all. The data indicate that the "flexion response cannot be regarded as an adaptive reaction which is refined from out of the original raw material of generalized conditioning."—D. E. Johanssen (Skidmore).

5439. Woodrow, H. Interrelations of measures of learning. *J. Psychol.*, 1940, 10, 49-73.—The learning scores of 82 subjects on tests of horizontal addition, digit-letter substitution, and 2-digit and 4-digit cancellation were fitted to Moore's learning curve and Robertson's autocatalytic curve. Nearly perfect correlations between the values of the parameters of both curves indicated that the measures of rate of learning and ultimate maximum score obtained by either equation possessed a validity independent of the equation used in calculating the scores. The values from Robertson's equation, together with initial score, final score, and raw score gain were correlated with each other for all 4 tests named above and for 3 tests practiced by another group of 56 subjects. From a study of the intercorrelations it was concluded: (1) there exists no general factor determining conditions or rate of improvement in widely different tests; (2) a general factor may be operating to determine rate of improvement in moderately similar tests; (3) no significant correlation exists between rate of improvement with practice and Otis and CAVD intelligence

test scores; (4) high final scores tend to be made by persons who keep on improving a long time rather than by those who make most rapidly the gain of which they are capable, and; (5) the size of the raw score gains made by individuals in a practice experiment is likely to vary inversely with the amount of pre-experimental practice.—F. A. Mote, Jr. (Connecticut).

5440. Youtz, R. E. P. "Recovery" following the extinction of previously learned word-number connections. *Psychol. Bull.*, 1940, 37, 489-490.—Abstract.

[See also abstracts 5274, 5298, 5302, 5317, 5328, 5375, 5431, 5472, 5495, 5513, 5514, 5545, 5564, 5576, 5583, 5585, 5593, 5622, 5637, 5659, 5664, 5681, 5711, 5739, 5745, 5759, 5775, 5776.]

MOTOR AND GLANDULAR RESPONSES

(Incl. Emotion, Sleep)

5441. Adams, R. Marihuana, *Science*, 1940, 92, 115-119.—The growth, preparation, psychological and physiological effects, and the extraction and chemical structure of the hemp plant marihuana are discussed. Among the psychological effects noted are the effect on inhibitory processes and the judgment of time, spatial aberrations, and the feeling of exaltation.—F. A. Mote, Jr. (Connecticut).

5442. Auersperg, A. Zum Begriff "Freude in der Funktion." (The concept of "joy in functioning.") *Wien. klin. Wschr.*, 1939, 52, Pt. 2, 693-695.—A serene, pleasantly toned directing of the will upon a concrete task, e.g., in athletic contests, is the basis for optimal performance of the musculature.—P. L. Krieger (Leipzig).

5443. Backmann, G. Lebensdauer und Entwicklung. (Life span and development.) *Roux' Arch. EntwMech.*, 1940, 140, 90-123.—P. L. Krieger (Leipzig).

5444. Barnes, T. C. Summation of electrical potential of living membranes (frog skin): a model of the electrical organ of fishes. *J. gen. Physiol.*, 1940, 23, 729-732.—Frog skins arranged in series in tubes of Ringer's solution exhibit summation of electrical potential which helps to explain the nature of electrical fields in the organism as a whole and in the electrical organs of fishes.—M. E. Morse (Baltimore).

5445. Bünning, E. Die Physiologie des Wachstums und der Bewegungen. (The physiology of growth and movement.) In Bünning, E., Mothes, K., & Wettstein, F. *Lehrbuch der Pflanzenphysiologie*, Bd. 2. Berlin: Springer, 1939. Pp. 267. RM. 19.80.—The author deals with the physiology of stimulus effects: stimulus and reception, protoplasmic phenomena, irritability in the narrower sense, mechanical stimuli (sprouting, seismic tremors, and thigmotropisms), the effects of radiations, temperature, electricity, and gravitation.—P. L. Krieger (Leipzig).

5446. Cogan, D. G. **Waltzing guinea pigs with particular reference to ocular movements and righting reflexes.** *Arch. Ophthalm., Chicago*, 1940, 24, 78-82.—The author describes a series of observations which yield the following conclusions: "1. Waltzing guinea pigs show a characteristic and complete absence of labyrinthine control over ocular movements and positions of the head and over the righting reflexes. 2. Although labyrinthine control is absent in the waltzing guinea pig, the righting reflex is carried on with more or less success by the visual sense and by contact with the ground. These two criteria can be separately studied by allowing the animal to fall through the air with and without a blindfold and land on a flat surface. The righting in the air is for the waltzer a function of vision; the righting on a flat surface is in the case of the blindfolded waltzer a function of contact."—*M. R. Stoll* (American Optical Company).

5447. Cohen, J. I. **Factors determining physical size and proportions.** *Nature, Lond.*, 1939, 144, 944.—64 mental patients, heterogeneous in age and disease, and 50 university students, homogeneous in age and social status, were subjected to 14 different anthropometric measurements. The two groups yielded similar results. Factorial analysis revealed that physique could be regarded as the resultant of two relatively independent sets of processes, one determining growth (or size) of the body as a whole and the other determining disproportionate development in the length or circumference of the body.—*L. A. Riggs* (Vermont).

5448. Collier, R. M. **The effect of instructions and type of task upon antitropic bilateral movement.** *J. exp. Psychol.*, 1940, 27, 172-183.—10 left handed and 18 right handed subjects were given the following tasks: (1) to make rapid continuous pronation-supination rotations of both forearms from signal 'Go' to 'Stop'; (2) to read aloud while performing task 1; (3) to perform each pronation and supination as a separate or discrete movement; (4) to perform task 1 but for a longer time. The following results were secured: (1) When bilateral antitropic movements are continuous, frequency and temporal extent of motor lead correspond with the normally preferred side. (2) This lead is accentuated by both a distracting task and a prolonged work period. (3) When type of task and instructions require separate responses rather than continuous movement, there is in some cases no consistent motor lead; in others the motor lead corresponds with the non-preferred side. (4) With a continuous series of movements the average lateral priority of response is 25 to 30 ms with a S. D. of about 25 ms.—*H. W. Karn* (Pittsburgh).

5449. Drew, G. C. **McDougall's experiments on the inheritance of acquired habits.** *Nature, Lond.*, 1939, 143, 188-191.—The experiments of McDougall are open to criticism on the grounds that an avoidance habit is not suitable for an inheritance problem, since innate characteristics such as timidity may influence the learning. Furthermore, incomplete records were kept during the first part of the investi-

gation, and the breeding of the control stock was complicated by the use of animals obtained from several different laboratories. The tetanizing shock may have produced neurotic behavior and other complications which are undesirable in such an investigation. Similar experiments by other investigators have not confirmed McDougall's results, and insufficient attention has been paid to the experiments of Tryon in which deliberate selective breeding produced groups of rats which were 'dull' or 'bright' with respect to a given learning problem.—*L. A. Riggs* (Vermont).

5450. Elftman, H. **The rotation of the body in walking.** *Arbeitsphysiologie*, 1939, 10, 477-484.—(*Biol. Abstr.* XIV: 10314).

5451. Elftman, H. **The force exerted by the ground in walking.** *Arbeitsphysiologie*, 1939, 10, 485-491.—(*Biol. Abstr.* XIV: 10315).

5452. Ford, F. R., & Walsh, F. B. **Tonic deviations of eyes produced by movements of head with special reference to otolith reflexes; clinical observations.** *Arch. Ophthalm., Chicago*, 1940, 23, 1274-1284.—A discussion of the neural mechanism through which voluntary and reflex eye movements are mediated introduces a presentation of 2 cases. The 1st case illustrates effects of optic fixation and semicircular canal reflexes. In the 2nd case apparently otolith reflexes are responsible for all vertical movements.—*M. R. Stoll* (American Optical Company).

5453. Freeman, G. L. **Physiological recovery from experimentally induced frustrations as a function of overt muscular discharge.** *Psychol. Bull.*, 1940, 37, 464.—Abstract.

5454. Freeman, G. L., & Kendall, W. E. **The effect upon reaction time of muscular tension induced at various preparatory intervals.** *J. exp. Psychol.*, 1940, 27, 136-148.—This investigation was designed to test the hypothesis that the optimal warning interval found in reaction time experiments is a function of the response curve of a preparatory muscular set. Tension of controlled intensity and locus was induced at various intervals prior to stimulus presentation. 2 series of observations were made, one with light and one with heavy tension loads induced in the reacting limb. Control observations were taken with only warning interval varied. The reaction times were significantly lowered when tension was induced at certain intervals prior to response. The heavy load condition showed a longer optimal preparatory interval than did the light load condition. The implication of the findings for the problem of set-response dynamics is discussed.—*H. W. Karn* (Pittsburgh).

5455. Friedman, A. P. **The effects of phenobarbital on muscular steadiness.** *Bull. Los Angeles neurol. Soc.*, 1940, 5, 120-123.—An unstated number of subjects was tested (both hands) on the Whipple steadiness tester at intervals during a period of 2 hrs. and 40 mins. At the end of the first half-hour 1.5 gr. of phenobarbital or 1.5 gr. of sugar were given in a capsule. Group averages showed slightly

decreased steadiness at the end of the period after phenobarbital, slightly increased steadiness after sugar. The author suggests that the use of phenobarbital in parkinsonism may increase the tremor.—*D. K. Spelt* (Mississippi).

5456. **Gukelberger, M.** Über die sportärztliche Beurteilung des Wettkämpfers vor und nach grossen Dauerleistungen. (Judgment by the sports physician of contestants before and after great endurance tests.) *Arbeitsphysiologie*, 1939, 10, 492-503.—(*Biol. Abstr.* XIV: 10194).

5457. **Häfeli, G.** Untersuchungen über die Abhängigkeit der Muskelermüdung von dem Sauerstoffgehalt der Einatmungsluft. (Investigations on the dependence of muscular fatigue on the oxygen content of the inspired air.) *Z. Biol.*, 1940, 100, 15-22.—When animals breathe an atmosphere containing 12% oxygen, fatigue appears more quickly than when they breathe normal air. Fatigue appears even more rapidly with only 10% oxygen. The frequency of respirations also plays a role. Judging from experiments on physiological fatigue, apparent or relative fatigue depends on a process in the musculature itself, and not in the end-organs.—*P. L. Krieger* (Leipzig).

5458. **Hardy, J. D., & Du Bois, E. F.** Differences between men and women in their response to heat and cold. *Proc. nat. Acad. Sci., Wash.*, 1940, 26, 389-398.—From measurements for 2 men and 7 women in a respiration calorimeter the following calculations were made: (1) average skin temperature; (2) effective radiating surface of the body; (3) total heat loss by radiation, convection, and vaporization; (4) heat stored in the body; (5) conductance of the peripheral tissues of the body; (6) the cooling constant of Newton's law of cooling. The men and women measured alike in the Newton's law constant and internal body temperature. In all the other adjustments to changes in the thermal environment the women had a physiological advantage. This is due to 3 factors: (1) a fall in heat production of women in warmer environments, (2) a thicker layer of insulation against cold, and (3) slightly better adaptation of skin temperature to meet thermal changes.—*D. E. Smith* (Alberta).

5459. **Hunt, J. McV.** The effect of feeding frustration in infancy upon adult hoarding in the white rat. *Psychol. Bull.*, 1940, 37, 487-488.—Abstract.

5460. **Ikemi, T.** Phenobarbital ni yo ru meitei jōtai. (Intoxication of phenobarbital.) *Nagoya J. med. Sci.*, 1939, 50, 487-494.—The effect of hypodermic injection of phenobarbital upon mental and physical changes in 130 subjects, including 82 men and 28 women suffering from mental disease and 10 normal subjects of both sexes, was investigated. On the mental side increase of attention and memory and decrease of counting ability in multiplication and subtraction were found. Increase of grip was noticed on the right hand of psychotic patients and on the left hand of normal individuals. As for tapping speed the psychotics showed some increase

but the normal group none. On the physical side slight increase of temperature and pulse rate, and decrease of maximum as well as minimum blood pressure was found, as well as trembling of the tip of the tongue and the eyelids. The knee jerk increased a little, the pupilar reflex retarded. The size of the pupil did not change. Normal individuals have a feeling of heat after the injection, then are exhilarated, and finally go to sleep. In normal adults no sex but considerable individual differences were found. Psychotic patients felt refreshed 15 minutes after the injection of 0.05 g of the drug, then became excitable, and ultimately went to sleep, 30 minutes after the injection. Difference in disease and constitution had no relation to the type of response.—*R. Kuroda* (Keijo).

5461. **Jacobson, E., Lackner, J. E., & Sinykin, M. B.** Activity of the human non-pregnant uterus. *Amer. J. Psychol.*, 1940, 53, 407-417.—The authors describe a method for measuring the contractions of the normal uterus by means of string galvanometers. 29 subjects were used, 15 of them free of uterine pathology. Uterine tonus was measured (for the first time in the intact organ) and found to vary in magnitude from subject to subject and from time to time. Spontaneous contractions were recorded repeatedly. The uterine contractions appeared to be relatively independent of the abdominal contractions, though there was slight evidence of a tendency for abdominal muscular contraction to promote uterine activity.—*D. E. Johannsen* (Skidmore).

5462. **Korchin, B., & Winsor, A. L.** Glandular dominance in humans. *J. exp. Psychol.*, 1940, 27, 184-191.—Contrary to earlier assumptions a significant difference between the rate of flow from the 2 parotid glands was observed in 69 out of 78 subjects. Dominance of one gland over the other was maintained in most subjects for activated as well as inactivated secretions. 67% of the male subjects and 14% of the females were left-glanded. 26% of the males were right-glanded and 64% of the females. 77% of the males and 22% of the females showed no glandular dominance. Exercise of the weaker gland increased its rate of flow somewhat in 3 subjects; but was not shown to be the crucial determinant of parotid glandular dominance, nor does such dominance seem to be related to handedness, footedness, eyedness, or earedness.—*H. W. Karn* (Pittsburgh).

5463. **Korchin, B., & Winsor, A. L.** The relationship of certain organic factors to individual differences in human parotid secretory rate. *J. exp. Psychol.*, 1940, 27, 192-194.—The authors state that "extreme variations in the rate of inactivated human parotid secretion do not appear to be related to weight, height, age, pulse rate, diastolic or systolic blood pressure. The reasons for the wide range of individual differences in secretory rate have not as yet been definitely ascertained. However, on the basis of recent studies these differences seem to be more a result of 'functional' rather than 'organic' causes."—*H. W. Karn* (Pittsburgh).

5464. Laven, H. Beiträge zur Biologie des Sandregenpfeifers (*Charadrius hiaticula* L.). (Contributions to the biology of the sandpiper: *Charadrius hiaticula* L.) *J. Orn., Lpz.*, 1940, **88**, 184-287.—Obviously the different individual acts of sandpipers contain many rigid instinctive elements in the sense of K. Lorenz: aggressive attitude; love flight; nesting complex, with turning, darting, sticking the beak in the sand, turning the eggs around, removal of the shell, which is always done in the same way; pecking; preening; scratching themselves; etc. Behavior during hatching of the young is also governed by the most various phenomena of appetite.—P. L. Krieger (Leipzig).
5465. Lepley, W. M. Frustration as a function of goal-distance. *Psychol. Bull.*, 1940, **37**, 486.—Abstract.
5466. Levy, D. M. Jealousy. *J. Pediat.*, 1940, **16**, 515-518.—Jealousy, as observed among young children of the same family, is largely due to jealousy of the mother's love. The intensity of the jealousy depends upon the strength of the bond between the mother and the child. While jealousy is disruptive in some respects, it may also be constructive and may promote stimulating competition among siblings.—E. Green (Bradley Home).
5467. Loeser, J. A. The concept of instinct. *Nature, Lond.*, 1939, **143**, 880-883.—There are no instincts of race-preservation or even self-preservation, for the behavior which has led in the past to these concepts is in reality attributable to the action of the following principles: (1) Every animal reacts only to personal or subjective needs. (2) The means by which the needs are satisfied are variable to suit the immediate conditions. (3) The achievement of biological purposes is not aimed at either consciously or instinctively, but is frequently an accompaniment of the reaction to needs. Thus the pleasure-pain principle is sufficient to account for behavior, and the concepts of instinct and purpose become unnecessary.—L. A. Riggs (Vermont).
5468. Molitor, A. Beobachtungen, den "Ortsinn" und Nestbau der Vespiden betreffend. (Observations regarding the "sense of locality" and the nest building activity among Vespidae.) *Zool. Anz.*, 1939, **126**, 239-245.—The homing ability of the odynerus varieties, who ceased to return even at 300 m., is much less than that of apidae, sphecidae, polistes, and vespa. *Vespa vulgaris* returned from a distance of 1 km. When the nests are altered, transported, and disturbed, the behavior is different according to species and individuals.—P. L. Krieger (Leipzig).
5469. Mowrer, O. H. Further experiments on the central vs. peripheral locus of preparatory set. *Psychol. Bull.*, 1940, **37**, 462-463.—Abstract.
5470. Müller, W. Zum Rechts-Links-Problem beim Menschen. (The right-left problem in man.) Leipzig: Diss., 1939. Pp. 50.—P. L. Krieger (Leipzig).
5471. Munn, N. L. The effect of knowledge of the situation upon judgment of emotion from facial expressions. *J. abnorm. soc. Psychol.*, 1940, **35**, 324-338.—One set of candid-camera lantern slides pictured everything in the original photograph, while the other contained only an enlargement of the facial expression of a participant. Facial-expression-alone slides were judged by 90 psychology students for the subjects' emotional reactions. A week later these students judged the expressions in the original settings. No terminology was suggested either time. Some expressions, viz., joy or happiness, surprise, distress, anxiety or worry, pain, terror or fear, were judged with a high incidence of agreement from the face alone. Viewing the posture and situation led to no significant change in the interpretations or in their frequency. A few expressions were judged to represent one emotion from the face alone and quite a different one when the whole picture was seen. Thus, the face of an athlete shown alone was classed as sorrow, but when seen in the whole picture as determination. Still other expressions elicited low agreement under both conditions. The claim that it is almost impossible to judge emotion from photographs of the face is not supported by the results of these candid photographs.—C. H. Johnson (Portland, Ore.).
5472. Oliver, C. P. Recessive polydactylism. *J. Hered.*, 1940, **31**, 365-367.—In one family, 3 out of a sibship of 11 children show a similar combination of polydactylism, mental deficiency, and a physically weak condition; all other members of the family, and all blood relatives, numbering 60 known, are normal with respect to these traits. As the parents are first cousins, the interpretation is given of a recessive Mendelian heredity. This is further supported by absence of similar anomalies in 4 generations of the family's history. The article is accompanied by a pedigree chart.—G. C. Schwesinger (American Museum of Natural History).
5473. Otsuji, T. Jikkenteki niryûka tanso chûdoku ni yoru chûsû shinkei keitô no henka. (On the changes of the central nervous system by experimental carbon disulphide poisoning.) *Psychiat. Neurol. japon.*, 1939, **43**, 425-426.—R. Kuroda (Keijo).
5474. Peatman, J. G., & Higgons, R. A. Relation of body weight and build to locomotor development. *Psychol. Bull.*, 1940, **37**, 523.—Abstract.
5475. Peter, H. Alkohol und Sedativa. (Alcohol and sedatives.) *Dtsch. Z. ges. gerichtl. Med.*, 1939, **31**, 113-154.—As measured by a manual dexterity and a Bourdon test, alcohol and 0.3 gm. luminal have the same effect. Since, however, there is no euphoria following luminal, people become conscious sooner of the diminution in accomplishment. In spite of the same psychic injury, the effect of luminal in respect to traffic accidents is less dangerous than that of alcohol.—P. L. Krieger (Leipzig).
5476. Rayner, G. W. Preliminary results of the marking of whales by the Discovery Committee. *Nature, Lond.*, 1939, **144**, 999-1002.—The author describes a method for marking whales and presents results on the number and kind of whales marked,

percentage of each captured, extent of their movements and migrations, and period of time required for such migrations.—G. F. J. Lehner (Miami).

5477. Roos, J. Nieuwe vondsten betreffende het leven van den foetus. (New findings concerning the life of the fetus.) *Tijdschr. Diergeneesk.*, 1939, 66, 1-13.—(*Biol. Abstr.* XIV: 10280).

5478. Rüppell, W. Neue Ergebnisse über Heimfinden beim Habicht. (New findings on the homing behavior of the hawk.) *Vogelzug*, 1940, 11, 57-64.—P. L. Krieger (Leipzig).

5479. Sandler, O. Vorgänge aus dem Bienenleben vom Standpunkt der Entwicklungsphysiologie. (Procedures in the life of bees from the point of view of developmental physiology.) *Z. wiss. Zool.*, Abt. A., 1940, 153, 39-82.—The swarming of bees is a process of halving and represents an harmonically equipotential differentiation. It may be comprehended physiologically according to the principle of counter-attraction, depending on whether the bee accidentally succumbs to the stimulation of the old or of the new queen and becomes her adherent. The choice of the new living place is a psychological matter. At the proper moment the entire swarm submits to the tracer bee which has in some way become the leader, on the basis of the directional stimulus which then affects all of the other bees. The attempts to localize the hive cluster are based essentially on rivalry of from 2 to 4 classes of stimuli (queen, height, position, quality of the hive) as well as on the lack of external localizing stimuli. In the latter case a free choice of place occurs. According to the principle of priority this is to be taken as the collective activity of a large and numerous swarm.—P. L. Krieger (Leipzig).

5480. Seward, J. P., & Seward, G. H. The effect of androgenic hormone on sex drive in the male guinea pig. *Psychol. Bull.*, 1940, 37, 465-466.—Abstract.

5481. Travis, R. C. Voluntary response to labyrinthine stimulation with small amplitudes of passive rotary oscillation. *Psychol. Bull.*, 1940, 37, 463-464.—Abstract.

5482. Tuttle, W. W., & Voltmer, E. J. A study of factors affecting neuromuscular tremors. *Arbeitsphysiologie*, 1939, 10, 530-533.—(*Biol. Abstr.* XIV: 10331).

5483. Wang, G. H., & Lu, T. W. Spontaneous activity of the spinal tadpoles of the frog and the toad. *Science*, 1940, 92, 148.—In contrast to the behavior of spinal frogs and toads who show little or no activity following spinal transection unless externally stimulated, tadpoles which have been decapitated or with only a fragment of the caudal portion of the cord intact show spontaneous movement without observable external stimulation. Spontaneous movements occur periodically and last from 1-60 seconds. Further destruction of the remaining spinal cord abolishes the activity. Difficulty of rearing such preparations until metamorphosis occurs has so far made it impossible to determine

whether such movements continue after the tadpoles become frogs.—F. A. Mote, Jr. (Connecticut).

5484. Wassiliev, G. A., & Woitkewitsch, A. A. Development and behavior of thyroidectomized young rooks (*Corvus frugilegus* L.). *C. R. Acad. Sci. U. R. S. S.*, 1939, 22, 374-379.—Rooks were thyroidectomized 10 days after hatching. Their poor development in comparison with normal control animals is revealed by retarded weight curves, incomplete development of plumage, disproportionate size of separate parts of the body, and lack of conditioned responses associated with feeding.—L. A. Riggs (Vermont).

5485. Wenger, M. A. Interrelationships among some physiological variables. *Psychol. Bull.*, 1940, 37, 466.—Abstract.

5486. Werner, F. Über die Lebensweise von Riesenschlangen im Terrarium. (The mode of life of giant snakes in a terrarium.) *Zool. Garten*, 1939, 11, 165-182.—This well-known German snake specialist discusses the character, temperament and reaction to pain of 28 species.—P. L. Krieger (Leipzig).

5487. Williams, R. H. The method of understanding as applied to the problem of suffering. *J. abnorm. soc. Psychol.*, 1940, 35, 367-385.—Complete comprehension and understanding of others is never possible because it would imply ultimately that two or more persons have the same stream of conscious experience. Understanding takes place in a context of signs and symbols and varies in completeness, intimacy or anonymity, and in relatively segmental or total orientations. Suffering is a meaning-relevant phase of human experience composed of (1) acute tension or strain, coupled with a feeling of dissatisfaction and (2) an element of meaning. There are various shadings in the specific emotional content of suffering, as expressed by such terms as sorrow, grief, despair, and agony. Suffering by several people in common implies mutual orientation in attitudes toward suffering. One of the meaningful, probably widespread, attitudes toward suffering, arises from the concept of sacrifice. Today common value-attitudes toward suffering are frequently lacking and suffering has ceased to be meaningful.—C. H. Johnson (Portland, Ore.).

5488. Wodzicki, K., Puchalski, W., & Liche, H. Untersuchungen über die Orientierung und Geschwindigkeit des Fluges bei Vögeln. V. Weitere Versuche an Störchen. (Studies of the orientation and speed of flight in birds. V. Further experiments with storks.) *J. Orn., Lpz.*, 1939, 87, 99-114.—Of 12 experimental storks 4 each were shipped from Butyny, formerly Poland, to Helsinki, Berlin, and Lisbon. On some of the birds a little magnet and on some a control splint was fastened between the eyes. The Lisbon experiment failed. 3 storks returned from Berlin in the course of 9-21 days, 1 with magnet and 2 with splints. This corresponded to a daily flight of from 43-107 km. 2 of the Finnish birds perished; the others were seen near the place of release up to 3 weeks later and then disappeared

without returning. Nothing could be concluded concerning the influence of the magnets on orientation.—*P. L. Krieger* (Leipzig).

5489. Young, P. T. Factoring hunger motivation. *Psychol. Bull.*, 1940, 37, 464.—Abstract.

[See also abstracts 5285, 5291, 5298, 5314, 5315, 5329, 5361, 5365, 5373, 5374, 5377, 5381, 5398, 5410, 5419, 5427, 5436, 5507, 5533, 5543, 5558, 5575, 5582, 5583, 5592, 5597, 5637, 5650, 5655, 5685, 5686, 5693, 5694, 5698, 5708, 5764, 5773.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

5490. Alexander, F. A jury trial of psychoanalysis. *J. abnorm. soc. Psychol.*, 1940, 35, 305-323.—A jury of experimental psychologists held trial over psychoanalysis and acquitted the defendant by a majority. The different members of the majority and of the minority who voted guilty had different reasons for their opinion. Most of the personal testimonies were not mere unemotional, intellectual evaluations because subjective reactions to experiences with psychoanalysis were requested. Scientific conscience and intellectual integrity won over emotional bias. The primary significance of psychoanalysis, apart from its therapeutic aspect, is that it has developed a method which is adjusted to the nature of the field of investigation, the human personality. The recognition of the basic mechanisms of repression, rationalization, projection, identification, displacement, the turning of psychic tendencies against one's self, fixation, and regression form the solid basis of a new dynamic psychology which offers an amazingly consistent causal understanding of normal and morbid behavior.—*C. H. Johnson* (Portland, Ore.).

5491. Berliner, B. Libido and reality in masochism. *Psychoanal. Quart.*, 1940, 9, 322-333.—From his discussion of libido and reality in masochism, the author concludes that the theory of the death instinct is neither necessary nor advantageous in explanation of masochism. Rather, self-destruction and a need for punishment are libidinal reactions to a negation of one's own existence by a childhood love object. The transference of this love object forms the permanent masochistic attitude, with masochism a specific pathologic development from the pleasure principle to the reality principle.—*M. H. Erickson* (Eloise Hospital).

5492. Blanton, S. An analytic case study of a cure at Lourdes. *Psychoanal. Quart.*, 1940, 9, 348-362.—A detailed medical report is given of a bedridden man suffering from tuberculosis of the lung, vertebra, and shoulder joint, and of his miraculous recovery at Lourdes within a period of approximately 2 weeks. The author discusses this case in terms of death instinct, libidinal drives, and transference relationship, and concludes that the "processes leading in the direction of death were not only halted but reversed, and the libido liberated in this way was put to use of the individual in the restoration of health." The author does not believe that this is

supernatural, but rather that it follows some law of function not yet fully described.—*M. H. Erickson* (Eloise Hospital).

5493. Carington, W. Experiments on the paranormal cognition of drawings. *Proc. Soc. psych. Res., Lond.*, 1940, 46, 34-151.—In each of 5 experiments, subjects were asked to attempt to reproduce 10 drawings, one an evening. The subjects were never in the same room with the drawing; usually they were separated from it by miles. The 250 subjects participating produced about 2200 attempted reproductions. 3 methods of evaluating the drawings were employed, all of which gave insignificant results as far as the subjects' success at reproduction was concerned. With the 3rd method, however, the subjects' drawings resembled the originals of the particular experiment for which they were intended significantly more than those of any of the other 4 experiments. In this method of evaluation a qualified naive judge compared each original with every drawing (250 times 2200 comparisons) and judged each instance as a hit, a miss, or doubtful. The analysis of the data is described in detail.—*J. G. Pratt* (Duke).

5494. Coriat, I. H. The structure of the ego. *Psychoanal. Quart.*, 1940, 9, 380-393.—The ego is discussed as a perceptive apparatus which maintains contact with reality and as possessed of a structure both topographic and dynamic in character.—*M. H. Erickson* (Eloise Hospital).

5495. Erickson, M. H. Clinical forms and varieties of hypnotic amnesia. *Psychol. Bull.*, 1940, 37, 441-442.—Abstract.

5496. Ferenczi, S. Bausteine zur Psychoanalyse. (Building stones for psychoanalysis.) Bern: Hans Huber, 1939. Vol. 3, pp. 543; Vol. 4, pp. 411.—The first 2 volumes were published by the author in 1926; the present volumes contain his posthumous works, a collection of papers and notes, edited by V. Kovacs.—*D. E. Johannsen* (Skidmore).

5497. Jekels, L., & Bergler, E. Instinct dualism in dreams. *Psychoanal. Quart.*, 1940, 9, 394-414.—After an extensive general discussion of sleep and its differentiation from death, the authors present the thesis that dreams, in addition to id wishes, have as a second constituent a more or less successful defense against a reproach of the superego.—*M. H. Erickson* (Eloise Hospital).

5498. Kardiner, A. Freud's scientific legacy. *New Republ.*, 1940, 102, 368-370.

5499. Kasanin, J. On misidentification: a clinical note. *Psychoanal. Quart.*, 1940, 9, 342-347.—A surgical patient, in mourning for her son, misidentified an interne as that son, responded well to treatment until he left the service, and thereupon developed a hysterical paralysis. Comment is made that misidentification may be a useful method by which to displace an introjected love object by another whose loss can be less painful.—*M. H. Erickson* (Eloise Hospital).

5500. Knight, R. P. **Introjection, projection and identification.** *Psychoanal. Quart.*, 1940, 9, 334-341.—Identification is an accomplished fact and not an act. Hence, it is not a mechanism, and it is not synonymous with introjection. Rather, it is the result of several different mechanisms acting separately or together. Thus, it may occur by displacement or substitution through misidentification, by projection, by introjection, but more frequently from the complex interaction of both projection and introjection.—M. H. Erickson (Eloise Hospital).

5501. Peuckert, W. **Der zweite Leib.** (The second body.) *Niederdtsh. Z. Volksh.*, 1939, 17, 174-197.—The second body is derived from the thought-world of the hunting stage. It is found among negroes, tribes of North Siberia and the ancient Germans. From it developed the idea of the second reality, as in second sight. Peuckert confirms K. Schmeifing in many particulars, but thinks it is insufficient to regard second sight as a simply eidetic phenomenon, explicable on purely physiological grounds. The cultural backgrounds must be considered as well.—P. L. Krieger (Leipzig).

5502. Róheim, G. **Magic and theft in European folk-lore.** *J. crim. Psychopath.*, 1940, 2, 54-61.—A survey of typical European superstitions indicates a close association between magic, witchcraft, and stealing. Psychoanalytic interpretations are offered for some of the beliefs. Bibliography.—A. Chapanis (Child Guidance Study; Franklin, Tenn.).

5503. Soal, S. G. **Fresh light on card-guessing; some new effects.** *Proc. Soc. psych. Res., Lond.*, 1940, 46, 152-198.—The writer explains that he was led by Mr. W. Carington's insistence to re-examine 128,350 trials at ESP with Zener cards by 160 subjects, previously reported as chance results. The object of the re-examination was to see whether there was any evidence of a displacement of hits, showing that the subjects had sometimes called, for example, not that card at which the agent was looking at the moment, but the last one at which he looked or the next one to be taken. Such an extra-chance displacement of hits seemed probable to Carington in the light of similar results he had obtained with drawings. In the re-examination it was found that 2 of the 160 subjects had yielded significant results when each call was compared with 3 cards, that actually intended and the ones immediately preceding and following.—J. G. Pratt (Duke).

5504. Stagner, R., & Krout, M. H. **A correlational study of personality development and structure.** *J. abnorm. soc. Psychol.*, 1940, 35, 339-355.—The authors have tried to devise a statistical check on the subjective judgments of psychiatrists and psychoanalysts regarding the relationship of personality characteristics and family constellations. Correlation coefficients obtained give considerable support to such psychoanalytic theories as universal Oedipus and Electra complexes. Feelings of favoritism, rejection, affective distance, and identification

are related to symptoms of satisfactory or unsatisfactory adjustment. Evidence confirms the grouping of symptoms into pure introversions (daydreaming and forgetting), introverted aggression (worry, remorse, suspicion, suicidal thoughts, and pessimism), and conversion symptoms (headaches, dizziness, suffocation, and intestinal pains).—C. H. Johnson (Portland, Ore.).

5505. Sterba, R. **The dynamics of the dissolution of the transference resistance.** *Psychoanal. Quart.*, 1940, 9, 363-379.—The author concludes his discussion with the statement that the dissolution of the transference resistances means both dissolution of resistances resulting from genuine infantile castration anxiety and liberation of the supporting resistances. These latter resistances can often only be separately dissolved for the reason that during the phase of the violent acting out of the transference, they are not accessible to interpretation and dissolution. He also feels that the supporting resistances do not cause an increase in the anxiety, although they may make it more refractory to dissolution in the analysis.—M. H. Erickson (Eloise Hospital).

[See also abstracts 5421, 5515, 5643.]

FUNCTIONAL DISORDERS

5506. Allen, C. **The sexual perversions and abnormalities.** London: Oxford, 1940. Pp. 205. 7s 6d.

5507. Almeida Prado, J. N. de. **Dos reflexos simpáticos na esquizofrenia e na psicose maniaco-depressiva.** (Sympathetic reflexes in schizophrenics and manic-depressives.) *Arch. Serv. Assist. Psicopat. S. Paulo*, 1938, 3, 147-159.—The author investigated the 8 reflexes mentioned below in 91 schizophrenics, 28 manic-depressives and 12 cases of other psychoses of both sexes. The pilomotor reflex varied much in intensity; red dermatographia appeared in the great majority of all the patients, lasting 5-70 minutes; white dermatographia was observed in only 8 cases, all Negroes. The oculocardiac reflex was normal in all except 2 women, one vagotonic, the other sympathicotonic. The plantar reflex was normal except in 2 men, who showed inversion. The cremasteric reflex was extremely variable in intensity. Geigel's reflex was observed frequently, as were also the scrotal reflex and that of the labial dartos. The pupillary reactions, obtained after finishing the various tests, were not remarkable.—M. E. Morse (Baltimore).

5508. Annette (Sister). **An integrated program of mental hygiene.** *J. Hlth phys. Educ.*, 1940, 11, 268-270.

5509. Archibald, C. H. **Psychoneuroses during first world war and since.** *Nat. Hlth Rev., Ottawa*, 1940, 8, 60-63.

5510. Balken, E. R., & Masserman, J. H. **The language of phantasy: III. The language of the phantasies of patients with conversion hysteria, anxiety state, and obsessive-compulsive neuroses.** *J. Psychol.*, 1940, 10, 75-86.—The authors present

a method of analyzing the language of psychoneurotic patients' fantasies about test pictures. Of 85 trial criteria 10 were selected as being most objective and significant in differentiating the characteristics of fantasy production which reflect the underlying psychodynamisms of conversion hysteria, anxiety state, and obsessive-compulsive neuroses.—*F. A. Mote, Jr.* (Connecticut).

5511. Balken, E. R., & Vander Veer, A. H. The clinical application of the thematic apperception test to neurotic children. *Psychol. Bull.*, 1940, 37, 517.—Abstract.

5512. Bartlett, H. M. Emotional elements in illness: responsibilities of the medical social worker. *Family*, 1940, 21, 39-47.

5513. Brown, R. R. The intelligence of the narcotic drug addict. *Psychol. Bull.*, 1940, 37, 442.—Abstract.

5514. Brugger, C. Die Vererbung des Schwachsinns. (The inheritance of feeble-mindedness.) *Handb. Erbbiol.*, 1939, 5, Part 2, 697-768.—Endogenous and exogenous forms of feeble-mindedness are strictly to be differentiated. Among the latter the primary factor is defective germ plasm. The frequency of feeble-mindedness among the relatives of the feeble-minded is presented in tables. The probability of its manifestation amounts to nearly 100%. The question of hereditary transmission is, however, still undecided, according to previous investigations. Distinguishable clinical forms include tuberous sclerosis, amaurotic idiocy, microcephaly, and cretinism.—*P. L. Krieger* (Leipzig).

5515. Busscher, J. de. [Paranoia and homosexuality.] *Encéphale*, 1939, 39, 691-706.—A detailed psychoanalytic study of a homosexual who later developed paranoia.—*A. Chapanis* (Child Guidance Study; Franklin, Tenn.).

5516. Carter, J. W., Jr. A note on psychodiagnosis. *J. consult. Psychol.*, 1940, 4, 137-139.—Difficulties in attempting to formulate a satisfactory curriculum for training clinical psychologists are largely due to confused thinking about the role and functions of psycho-clinicians. "Psychodiagnosis is the evaluation of an individual's behavior equipment preparatory to helping him adjust better in the future." The method is essentially one of interviewing which may be either standardized or unstandardized. When both types are used effectively, cross-sectional and longitudinal dimensions of behavior are obtained.—*P. S. de Q. Cabot* (Simmons).

5517. Child, I. L. The relation between measures of infantile amnesia and of neuroticism. *J. abnorm. soc. Psychol.*, 1940, 35, 453-456.—Measures of infantile amnesia and scores of several standardized tests of neuroticism from 3 groups of college students showed virtually no correlation. Because of the dubious assumptions involved in predicting possible results of this study from psychoanalytic theory, the findings may not be taken at present as evidence against any psychoanalytic postulates. They do, however, effectively negate an empirical association

which had been tentatively reported by other authors.—*C. H. Johnson* (Portland, Ore.).

5518. Claude, H., & Rubenovitch, P. *Thérapeutiques des affections mentales*. (Therapeutics of mental diseases.) Paris: Masson, 1940. Pp. 336. Fr. 85.00.—Part 1 deals with the history, techniques, results, and evaluation of fever therapies classified into 4 groups: infection, organic, chemical, and physical. Part 2 is concerned with the method of shock therapy. Methods of Sakel, von Meduna, Aschner, narcotherapy and electro-narcosis and their applications are discussed. Mechanisms involved are also studied. The authors consider the diencephalon the centre involved in changes in affectivity present in all schizophrenics.—*J. E. Bader* (Brandon State School).

5519. Cohen J. I. Physical types and their relations to psychotic types. *J. ment. Sci.*, 1940, 86, 602-623.—Analysis of anthropometric measurements on 62 Jewish female cases, 31 schizophrenics, 22 manic-depressives, and 9 mixed, revealed 2 factors, one governing general growth, the other differences in proportion. In the case of a group of 47 English male patients a significant correlation of .413 was found between a combined weighted measure of arm length, leg length, waist circumference, pelvic circumference, and schizophrenia and manic-depression. For 51 Jewish female patients a significant correlation of .557 was obtained between a combined weighted measure of chest depth and pelvic breadth and manic-depression and schizophrenia.—*W. L. Wilkins* (Milwaukee).

5520. Committee of the American Medical Association and the American Library Association. *Books about mental health*. Chicago: Amer. Library Ass., 1940. Pp. 5. \$1.00 per 100.—An annotated bibliography of 33 titles on mental hygiene and mental disorders.—*H. L. Ansbacher* (Brown).

5521. Crothers, B. Mental hygiene as related to chronic illness. *J. Lancet*, 1940, 60, 208-210.

5522. Deutsch, F., Kaufman, M. R., & Blumgart, H. L. Present methods of teaching. *Psychosom. Med.*, 1940, 2, 213-222.—The authors formulate an outline of a teaching program developed at Beth Israel Hospital and designed primarily to instruct medical students in psycho-somatic relationships. Topics discussed in this report are: the fallacy of diagnosing psychoneurosis by exclusion; psychological relations to organic illness; patient-physician relationship; history-taking; the problem of therapy; organization.—*P. S. de Q. Cabot* (Simmons).

5523. Dixon, H. H., & Haugen, G. B. Practical approach to anxiety tension states. *Northw. Med.* Seattle, 1940, 39, 132-135.

5524. Donley, D. E. Some of the psychiatric problems encountered by the general practitioner. *Ohio St. med. J.*, 1940, 36, 501-503.

5525. Dunham, H. W. The development of social psychiatry. *Ment. Hlth Bull. Ill. Soc. ment. Hyg.*, 1940, 18, 4-7.

5526. DuPlessis, G. L. Headaches. *Amer. J. Optom.*, 1940, 17, 375-384.—Headaches are frequently attributed by patients to ocular disorders when they have other bases as indicated by a list of conditions with which headaches of various sorts are associated.—M. R. Stoll (American Optical Co.).

5527. Ernst, M. G. A psychotherapeutic approach to schizophrenia. *J. ment. Sci.*, 1940, 86, 668-674.—The basis of schizophrenia is considered to be dis-symbole, which is defined by Skottowe as "a state of mind which manifests itself by the inability of the patient to formulate his conceptual thoughts upon personal topics or to discriminate the gradations of his emotions in language which is intelligible to others." The technic of communication with advanced schizophrenics is discussed from an analytic point of view, and the schizophrenic language of expression catalogued under 5 heads: drawing; posture; creative ability; behavior associated with taking of food, defecation, urination; communication in words.—W. L. Wilkins (Milwaukee).

5528. Faulkner, W. B., Jr. Severe esophageal spasm. *Psychosom. Med.*, 1940, 2, 139-140.—Esophagoscopic examination of a 26 year old male patient complaining of vomiting and epigastric pain revealed that severe spasm and complete relaxation were determined by emotional factors, the former by thoughts of insecurity and frustration, the latter by accepting suggestions of a pleasant, secure and desirable environment.—P. S. de Q. Cabot (Simmons).

5529. Fields, P. E. A quantitative investigation of bodily changes induced in aberrant and normal rats by varying the difficulty of visual size discrimination. *Psychol. Bull.*, 1940, 37, 486-487.—Abstract.

5530. Finger, F. W. A quantitative approach to "conflict" and "experimental neurosis." *Psychol. Bull.*, 1940, 37, 485.—Abstract.

5531. Fletcher, F. M. Certain behavior patterns associated with a conflict situation in young chimpanzees. *Psychol. Bull.*, 1940, 37, 488.—Abstract.

5532. Frederiksen, N. An experimental study of the effects of frustration on the behavior of young children, with especial reference to negativism. *Psychol. Bull.*, 1940, 37, 488.—Abstract.

5533. Freeman, H., & Rodnick, E. H. Autonomic and respiratory responses to changes of intrapulmonary atmosphere. *Psychosom. Med.*, 1940, 2, 101-109.—Cardiovascular and respiratory reactions of 31 normal male subjects and 29 male schizophrenes were studied under conditions of inspiring oxygen with temperature raised to 41° C. and humidity at saturation point. Blood pressure, heart rate, galvanic skin resistance, respiratory rate, and amplitude were used as indicators. Significantly greater autonomic and respiratory responses were recorded for the normal group, thus experimentally reinforcing the theory that schizophrenes are sluggish in the adaptive reactivity of the autonomic nervous system.—P. S. de Q. Cabot (Simmons).

5534. Gebattel, V. E. v. Die Störungen des Werdens und des Zeiterlebens im Rahmen psy-

chiatrischer Erkrankungen. (Disturbances of progress and temporal experience in the confines of psychiatric illnesses.) *Gegenw. Probl. psychiat. neurol. Forsch.*, 1939, 54-71.—P. L. Krieger (Leipzig).

5535. Gilliland, A. R. Differential functional loss in certain psychoses. *Psychol. Bull.*, 1940, 37, 439.—Abstract.

5536. Gorriti, F. Moralidad en los alienados. (Ethical behavior of psychotics.) *Sem. méd. B. Aires*, 1939, 46, 1207-1209.—The sociological aspects of the life of mental patients has been little studied. Drawing on a long institutional experience, Gorriti attests the high ethical attitudes of many psychotics. These should be recognized by psychiatrists.—M. E. Morse (Baltimore).

5537. Griffin, J. D. M. Mental hygiene in Canada. *Canad. publ. Hlth J.*, 1940, 31, 163-174.

5538. Grinker, R. R., & McLean, H. V. The course of a depression treated by psychotherapy and metrazol. *Psychosom. Med.*, 1940, 2, 119-138.—A 43 year old female patient suffering from depression was subjected to 4 forms of therapy: theelin, nurse-companion, mild phenobarbital solution, and psychotherapeutic interviews. After metrazol therapy the patient gained weight, slept well and was relieved of her depression. A general discussion is given of the psychodynamics of the patient's reactions and of three possible explanations of recovery from metrazol therapy under the headings of psychological, biochemical, and anatomico-physiological.—P. S. de Q. Cabot (Simmons).

5539. Gutiérrez-Noriega, C. Teoría de la descarga de energía nerviosa y de su acción neurofíláctica en la terapéutica convulsivantes. (Theory of discharge of nervous energy and its neurophilactic action in therapy by convulsants). *Rev. Neuro-Psiquiat.*, Lima, 1940, 3, 163-189.—Discharges of nervous energy are autonomic movements of emotional origin, called neurophilactic or protective reactions. The fundamental purpose is to free the organism from painful tensions. Between the different types of reactions exists a reciprocal antagonism, which becomes most obvious between the convulsive attack and the hyperexcitability of epileptics. The attack is the result of the hyperexcitability of the nervous system and is a means of relieving the organism. Such attacks can be brought on in the normal individual by very intense stimuli. The crises of agitation arises when convulsive susceptibility has diminished. The therapeutic effect of metrazol is explained in part by the protective function against great excitements that the convulsives cause. Mental processes are actual derivatives of emotions or general irritability and likewise can cause these hyperexcited states. Subcortical nuclei as the centres for regulation, distribution, etc., have particular importance in the protective reactions and all convulsives of the metrazol type act upon such areas. This neurophilactic action is suggested as one of the many mechanisms in treatment of mental disease.—J. E. Bader (Brandon State School).

5540. Hall, C. S., & Martin, R. F. A standard experimental situation for the study of abnormal behavior in the rat. *J. Psychol.*, 1940, 10, 207-210.—The authors propose that the air-blast method be adopted "as a standard experimental situation for studying the serious behavior derangements of rats." They define their conception of a standard situation, describe the method, and list reasons justifying their choice.—F. A. Mote, Jr. (Connecticut).

5541. Holzapfel, M. Über Bewegungstereotypen bei gehaltenen Säugern. III. Analyse der Bewegungstereotypie eines Gürteltieres. (*Dasyurus villosus Desm.*). (Movement stereotypes in captive mammals. III. Analysis of movement stereotypes of an armadillo.) *Zool. Garten*, 1939, 10, 184-193.—Ground suitable for digging corresponds to the living habits and milieu of an armadillo. The impossibility of pursuing these habits in a cage, during an experiment, led to a protracted excitement that was manifested by persistent running about. This occurred to the same extent regardless of whether there was diffuse lighting or darkness, or whether the confines were furnished with moveable or immovable objects.—P. L. Krieger (Leipzig).

5542. Ismael, W. Observacoes psicologicas em esquizofrenicos tratados pelo método de Sakel. (Psychological observations of schizophrenics treated by Sakel's method.) *Neurobiologia, Pernambuco*, 1939, 2, No. 4.—The author reviews the history of the treatment outlined by Sakel and gives summaries of 5 cases treated in his hospital. There is a discussion of spontaneous hypoglycemia and the classification of clinical forms. Among the psychic manifestations of the patients undergoing the treatment are changes in sense-perception, memory, actions, language, thought, affectivity, orientation, and attention.—J. E. Bader (Brandon State School).

5543. Jones, M. R. The relation of "nervous" movements to certain forms of stimulation and inhibition. *Psychol. Bull.*, 1940, 37, 524-525.—Abstract.

5544. Kelley, D. M. Conjuring as an asset to occupational therapy. *Occup. Ther.*, 1940, 19, 71-108.

5545. Kinder, E. F. Some results of a systematic attempt to recover memories of psychopathological experiences during a psychosis. *Psychol. Bull.*, 1940, 37, 440.—Abstract.

5546. Laforgue, R. The relativity of reality; reflections on the limitations of thought and the genesis of the need for causality. *Nerv. ment. Dis. Monogr. Ser.*, 1940, No. 66. Pp. 92.—Chapter headings are: Concerning anxiety; on conflicts in the affective development of man; on the relativity of reality and the genesis of the need of causality; reflections concerning the intellect; reflections on the notions of free will, of liberty and of death. Phenomena of anxiety, religious faith and libido development are discussed in the light of the view that both individual and group adjustments to reality depend

upon the type of libido organization.—G. Brighouse (Occidental).

5547. Lewis, E. O., & McKerracher, D. G. Diagnosis and treatment of neurotic disorders. *Canad. med. Ass. J.*, 1939, 41, 366-373.—M. E. Morse (Baltimore).

5548. Mackay, F. H. Neuroses of war. *Nat. Hlth Rev., Ottawa*, 1940, 8, 93-97.

5549. Max, L. W. Electroencephalographic aspects of migraine and of the common headache. *Psychol. Bull.*, 1940, 37, 494.—Abstract.

5550. Mittelman, B., & Wolff, H. G. Emotional factors in gastric neurosis and peptic ulcer: experimental studies. *Psychol. Bull.*, 1940, 37, 441.—Abstract.

5551. Montassut, M. La dépression constitutionnelle. (Constitutional depression.) Paris: Masson, 1938. Pp. 210.—M. H. Erickson (Eloise Hospital).

5552. Morgan, C. T. The rôle of 'conflict' in the production of abnormal behavior in the rat. *Psychol. Bull.*, 1940, 37, 484-485.—Abstract.

5553. Moschowitz, E. The psychogenic origin of organic diseases. *New Engl. J. Med.*, 1935, 212, 603-611.—5 organic diseases believed by the author to be of psychogenic origin are essential hypertension, Graves' syndrome, gastric and duodenal ulcer, cardiospasm, spastic colon, and mucous colitis. Common features of these ailments are that they (1) exaggerate a normal function, e.g., hyperchlorhydria in peptic ulcer, (2) are essentially human diseases not produced among lower animals, (3) rarely occur until emotions and reasoning ability become sensitive and complex, (4) tend to recur, (5) are related to crises and emotional stresses. Treatment should be directed at prophylaxis.—P. S. de Q. Cabot (Simmons).

5554. Murakami, J. Genchô ni kansuru seishin-byôrigakuteki kenkyû. (Psychiatric studies on auditory hallucination) *Psychiat. Neurol. japon.*, 1939, 43, 757-773.—Analyzing the clinical symptoms the author found an acute hallucination in schizophrenia and concludes that auditory hallucination is essentially a mental hallucination resulting from mental automatism. His opinion is in opposition to those who insist that auditory hallucination is caused only through stimulation of the sensory centers of the brain.—R. Kuroda (Keijo).

5555. Neilsen, J. M. The unsolved problems in aphasia. II. Alexia resulting from a temporal lesion. *Bull. Los Angeles neurol. Soc.*, 1939, 4, 168-183.—Analysis of 21 cases of temporal lobe lesion indicates that (1) involvement of the posterior end of the (major) superior temporal convolution results in failure to interpret reading matter, although recognition is intact; (2) injury to the angular gyrus destroys recognition of printed matter, although comprehension of spoken language is not involved; (3) the angular gyrus may also function in comprehension of reading matter in conjunction with Wernicke's area.—D. K. Spelt (Mississippi).

5556. Neilsen, J. M. The unsolved problems in aphasia. III. Amnesic aphasia. *Bull. Los Angeles neurol. Soc.*, 1940, 5, 78-84.—Amnesic aphasia has been reported accompanying lesions of the temporal lobe, the angular gyrus, and the parietal lobe. Analysis of 7 cases from the literature shows that amnesic aphasia results from lesions of the "posterior temporo-occipital region or its superior connection with the rest of the brain through the temporal isthmus" (Brodman's areas 21, 22, and 37).—D. K. Spelt (Mississippi).

5557. Nelkin, S. Mental hygiene and morals. *Ment. Hlth Observ.*, 1940, 7, 2-10.—This article is concerned with an inquiry into the meaning of the term mental hygiene. The outcome of the author's argument is that mental hygiene and Christian morality have identical aims although they differ in viewpoint and method.—M. Keller (Butler Hospital).

5558. Nesbitt, M. Psychosis due to exogenous toxins—marihuana. *Ill. med. J.*, 1940, 77, 278-281.

5559. Page, J. D. Studies in electrically induced convulsions in rats. *Psychol. Bull.*, 1940, 37, 485-486.—Abstract.

5560. Parker, C. S. Observations on the autonomic functions during the hypoglycaemic treatment of schizophrenics. *J. ment. Sci.*, 1940, 86, 645-659.—The reactions of the patient during insulin shock treatment is described in detail. Procedures for measuring pupillary reactions during various stages of the shock are given in full and their significance discussed. In the light of the nervous and emotional reactions of the patient the roles of the sympathetic and parasympathetic systems are discussed to show why there has been much diversity of medical opinion on the significance of hypoglycemic shocks.—W. L. Wilkins (Milwaukee).

5561. Read, C. F. Mental medicine today. *Wis. med. J.*, 1940, 39, 267-271.

5562. Rodnick, E. H. The effect of metrazol shock upon habit systems. *Psychol. Bull.*, 1940, 37, 440-441.—Abstract.

5563. Rogerson, C. H. The differentiation of neuroses and psychoses, with special reference to states of depression and anxiety. *J. ment. Sci.*, 1940, 86, 632-644.—A critical discussion of the literature on the differentiation of the psychoses and neuroses, particularly in various cases of depression, from a scientific as well as a clinical point of view. Differentiation in relation to anxiety and depression is rejected, and Ross's point that the psychotic lives in a world of fantasy and the neurotic in the real world is made the basis of consideration of four pertinent illustrative cases.—W. L. Wilkins (Milwaukee).

5564. Shipley, W. C. A comparison of two techniques for measuring intellectual impairment and deterioration. *Psychol. Bull.*, 1940, 37, 438-439.—Abstract.

5565. Suárez, L. A., & Méndez, M. Influencia de la posición cefálica y de las excitaciones ópticas

en un caso de ataxia de origen frontal. (Influence of head position and optic excitation in a case of frontal lobe ataxia). *Rev. Neuro-Psiquiat.*, Lima, 1940, 3, 227-237.—The case of a 4 year old child, victim of pleuro-pulmonar tuberculosis, who for 3½ months presented epileptic attacks (Jacksonian type) is reviewed. Gradually incoordination of lower left limb and functional uselessness of upper left limb developed. Increase of incoordination was observed when vision was occluded preceding and following an attack. The disturbances were more marked when the head was flexed, and even more acute when the head was bent down. The symptoms indicated a cortical lesion at the basis of the 1st and 2nd horizontal frontal convolutions and adjacent areas.—J. E. Bader (Brandon State School).

5566. Symonds, P. M. Therapeutic value of the course on mental hygiene. *Psychol. Bull.*, 1940, 37, 471-472.—Abstract.

5567. Watson, G. New trends in clinical procedures and psychotherapy. *J. consult. Psychol.*, 1940, 4, 81-95.—In the field of intelligence testing, attention is drawn to the 1937 Revision of the Stanford-Binet test, the new Kuhlmann test, the Bellevue Intelligence Scale, the Ferguson Form Boards, and the Thurstone Primary Mental Abilities Test. Less impressive improvements in aptitude testing are noted. New measures of achievement refer to the relationship with life-centered educational objectives. Few recent contributions have been made with paper-and-pencil personality tests. Clinicians are increasingly interested in such projective techniques as the Rorschach test, the experimental use of free play, and in Murray's "apperception test." Outstanding contributions are promised in longitudinal long term studies of personality development. Psychologists are now much more interested in therapy than formerly and psychoanalysis is gradually winning greater respect. The development of group methods of therapy is a recent trend. Awareness of the relationship between individual and social psychology is growing.—P. S. de Q. Cabot (Simmons).

5568. Weinberg, J., Goldstein, H. H., & Edlin, J. V. Chemotherapeutic and spontaneous recoveries from psychoses; a comparison as to quality. *Ill. med. J.*, 1940, 77, 266-268.

5569. Wenger, P. The importance of psychotherapy in sickness insurance. *Psychosom. Med.*, 1940, 2, 223-226.—The author reports on the success of systematic psychotherapy with 100 employees in Vienna insured against sickness. Individual analysis was used. In insurance practice even more than in private practice it is important to win the complete trust of patients since gratis or insurance treatment seems inferior in itself.—P. S. de Q. Cabot (Simmons).

5570. Werner, H., & Strauss, A. A. Pathology of the figure-background relation in the child. *Psychol. Bull.*, 1940, 37, 440.—Abstract.

5571. Whitaker, E. de A. Automatismo mental de Clérambault e distúrbios hipofisodiencefálicos.

(Clerambault's mental automatism and hypophyseal diencephalic disturbances.) *Rev. Neurol. Psiquiat., S. Paulo*, 1940, 6, 55-67.—The case of a 30 year-old man, added to the two cases previously reported in the literature, points to an irritative or degenerative lesion in the hypophyseal region as the probable cause of Clérambault's syndrome. The mental symptoms were a continuous unintelligible murmuring, probable auditory hallucinations, emotional crises, and sudden, unexpected motor reactions of flight, resembling fugues. The pneumoencephalogram showed mild frontal and parietal atrophy and enlargement of the basal cisterns with confused shadows. There was a diminution of urea excretion without renal lesion, hyperthyroidism, and allergy as manifested by eczema and eosinophilia.—*M. E. Morse* (Baltimore).

5572. Wilson, L. Psychiatrists and the messianic complex. *Social Forces*, 1940, 18, 521-525.

5573. Wittman, M. P., & Read, C. F. A scale for evaluating prognosis in schizophrenia. *Psychol. Bull.*, 1940, 37, 438.—Abstract.

5574. Yahn, M., & Silva, T. da. Estados mentales en esquizofrénicos después de comas prolongados por la insulina. (Mental conditions in schizophrenics following prolonged insulin comas.) *Arch. Serv. Assist. Psicopat. S. Paulo*, 1939, 4, 183-195.—After insulin treatment, both hebephrenic and paranoid schizophrenics may present a picture different from the original disease and characterized by the epileptic mentality or by a fantastic dreamy delirium, followed by a dullness similar to that of imbeciles. There may also be perversions.—*M. E. Morse* (Baltimore).

[See also abstracts 5259, 5303, 5309, 5311, 5402, 5403, 5408, 5473, 5504, 5513, 5632, 5648, 5658, 5667, 5671, 5674, 5679, 5690, 5727, 5729, 5744, 5748, 5750, 5751, 5756, 5758, 5762, 5769, 5770, 5774.]

PERSONALITY AND CHARACTER

5575. Alexander, F., & Saul, L. J. Respiration and personality—a preliminary report: Part I. Description of the curves. *Psychosom. Med.*, 1940, 2, 110-118.—The experimental situation and the character of spiograms of 30 men and 36 women patients as part of an investigation conducted by the Chicago Institute for Psychoanalysis are described. Respiratory tracings of 199 other patients were also studied including those of psychotics and of patients with peptic ulcers. A correlation is suggested "between intaking and eliminative tendencies which are observable in the mental life and characteristics of the spiograms." No correlations were found with the shape of the chest as determined by thoracimetric measurements. A spiogram is as typical of the individual as his handwriting is. Studies of further correlations are in progress.—*P. S. de Q. Cabot* (Simmons).

5576. Babcock, H. Personality and efficiency of mental functioning. *Amer. J. Orthopsychiat.*, 1940,

10, 527-532.—Mental efficiency is an underlying factor in the traits of neuroticism, introversion, dominance, and confidence. The personality traits were measured by the Bernreuter Personality Inventory, and efficiency of mental functioning, i.e., speed and adequacy of response as opposed to level of intelligence, by the Babcock-Levy Examination.—*R. E. Perl* (New York City).

5577. Baldwin, A. L. The statistical analysis of the structure of a single personality. *Psychol. Bull.*, 1940, 37, 518-519.—Abstract.

5578. Baumgartner-Tramer, F. Die Charaktere im Gemeinschaftsleben. (Character types in social life.) *Gesundh. u. Wohlf.*, 1940, No. 6, 411-422.—Discrepancies between superficial impressions and actual psychological situations prove that classification into social, antisocial, and asocial types is too simple. The social type is divided into the truly sympathetic and the hail-fellow, egocentric types. The former is always considerate of his partner but, due to handicaps, he may be unadapted to ordinary social life. Both types are socially useful, and they have created the democratic state. The antisocial type may be only selectively antisocial, but always seeks a weaker partner to satisfy his hypertrophied, selfish ego. Hate is thirst for power. Its political expression is the totalitarian state. The asocial attitude may disguise inferiority feelings, anxiety, narcissism, or exclusive devotion to one idea (often a social one). This type is often highly intelligent, and picks on the defects of other types, thus rationalizing its unsociableness. True asociality is complete indifference to mankind, possibly a manifestation of vital indifference, or weakness of the self-preserved instinct.—*M. E. Morse* (Baltimore).

5579. Beck, S. J. Sources of error in Rorschach test procedures. *Psychol. Bull.*, 1940, 37, 516-517.—Abstract.

5580. Bolgar, H., & Fischer, L. The toy test: a psychodiagnostic method. *Psychol. Bull.*, 1940, 37, 517-518.—Abstract.

5581. Boynton, P. L. An analysis of teachers' responses to a personality inventory. *Psychol. Bull.*, 1940, 37, 503.—Abstract.

5582. Burks, B. S. Personality determinants in a new case of identical twins reared apart. *Psychol. Bull.*, 1940, 37, 522.—Abstract.

5583. Gardner, I. C., & Newman, H. H. The alphabetical Perricone quadruplets. *J. Hered.*, 1940, 31, 307-314.—The record of the Perricone quadruplets constitutes the highly improbable case of a four-egg, one-sex set of human organisms, all ovulated, fertilized, gestated, born alive and well, and living thus far at least to the age of 11 years. The 4 boys were born on a small truck farm in Texas of Italian parents who also have produced 5 other boys and 1 girl. In spite of maternal efforts to keep the quadruplets as much alike as possible, they are as unlike as are the 5 older brothers, whom indeed each quad separately resembles more than he does any one from his own quad set. The quads are different physically, emotionally, volitionally, and in the

type of things they do best, as adjudicated by test results. Musically, they show considerable ability; intellectually, they resemble one another rather closely, all being about at average. This latter similarity is interpreted by the authors as being due more to homogeneity of stock than to common environmental and training effects. More evidence on this point will be presented in a later report to appear shortly on another set of quadruplets.—G. C. Schwesinger (American Museum of Natural History).

5584. Gardner, J. W. A quantitative study of sources of self-esteem. *Psychol. Bull.*, 1940, 37, 504.—Abstract.

5585. Hanfmann, E. Personal patterns in the process of concept formation. *Psychol. Bull.*, 1940, 37, 515.—Abstract.

5586. Hannah, H. B. An analysis of some of the factors in personality influencing health. *J. Lancet*, 1940, 60, 105-107.

5587. Hertz, M. R. Some personality changes in adolescence as revealed by the Rorschach method. *Psychol. Bull.*, 1940, 37, 515-516.—Abstract.

5588. Huntley, C. W. Judgments of self based upon records of expressive behavior. *J. abnorm. soc. Psychol.*, 1940, 35, 398-427.—One of the most universal attributes of human nature is the striving for self-esteem. Two groups gave judgments on their own expressions, such as mirrored writing, voice, clasped hands, etc., 6 months after these expressions had been recorded by picture or talking-machine. The original recordings were made without the subjects' knowledge. It was found that when the individual judges himself unawares, his striving for self-esteem and feelings of insufficiency are usually expressed. In the instances of partial recognition, the ego is threatened and all the force of self-justification brought into play, with the result that the self-judgments are almost entirely favorable. Finally, when the limen of recognition is reached, the demands of modesty operate and the self-judgments become more moderate, although the strivings for self-esteem still require that the individual judge himself slightly above average, as occurs repeatedly in self-rating studies.—C. H. Johnson (Portland, Ore.).

5589. Imasaki, H. [On the relation of character and friendship.] *Jap. J. Psychol.*, 1940, 15, 106-114.—The relation of friendship tends to be established among persons sympathetic with each other, or in other words: birds of a feather flock together. The introvert unintentionally avoids the extravert and vice versa, similar character tendency being an essential condition in the establishment of friendship.—R. Kuroda (Keijo).

5590. Janney, J. E. A contrast of relief stereotypes of "reliefers" with employed persons. *Psychol. Bull.*, 1940, 37, 475.—Abstract.

5591. Kühnel, G. Schwererziehbarkeit und Charakteranlage. (Educational problem behavior and character.) *Veröff. Berl. Akad. ärztl. Fortb.*, 1939, 5, 263-274.—Individuation is the basic process of

psychical development, which normally undergoes catastrophes and metamorphoses. These are always present when one state supplants another, as around the 3rd year (negative phase), the 8th (period of the *enfant terrible*), and the 14th (puberty). The attainment of an inner environment (J. H. Schultz) characterizes the achievement of psychical maturity. After 14, psychical deviations correspond entirely to those of adults. There are intellectually normal children who go to pieces while seeking independence of character and develop an external aspect of feeble-mindedness. This signifies a retreat into infantile irresponsibility. In such cases diagnosis based on testing methods is useless, because it misses the problem of the uniqueness of the individual.—P. L. Krieger (Leipzig).

5592. Landis, C., & Bolles, M. M. Psychosexual immaturity. *J. abnorm. soc. Psychol.*, 1940, 35, 449-452.—This study of the influence of sex factors in the development of the personality showed that certain women are retarded in the development of attitudes, experience, and practices characteristic of the psychosexuality of most women of their age. Such women tend to have poor childhood health records and to remain attached to their parents in adult life. They have frequently strong negative attitudes toward sex or are generally apathetic in all forms of love and affection. If married, they make poor marital adjustments. Psychosexual immaturity occurs more frequently in those who were physically immature, so that one may speak of general psychobiological retardation.—C. H. Johnson (Portland, Ore.).

5593. Lewis, W. D. A comparative study of the personalities, interests, and home background of gifted children of superior and inferior educational achievement. *Psychol. Bull.*, 1940, 37, 525.—Abstract.

5594. Ligon, E. M. A practical formula for problems involving the total personality. *Psychol. Bull.*, 1940, 37, 519-520.—Abstract.

5595. Lorentz, F. H. Neue Konstitutionstypen des Körperbaues. (New constitutional body types.) *Dtsch. med. Wschr.*, 1940, 66, 628-629.—The author offers concrete suggestions to extend the existing constitutional typologies and proposes a non-specific normal type.—P. L. Krieger (Leipzig).

5596. Maslow, A. H. Self-esteem (dominance-feeling) and sexuality. *Psychol. Bull.*, 1940, 37, 504.—Abstract.

5597. McCann, W. H. Nostalgia: a descriptive and comparative study. *Psychol. Bull.*, 1940, 37, 506-507.—Abstract.

5598. Mette, A. Die psychologischen Wurzeln des Dionysischen und Apollonischen. (The psychological roots of the Dionysian and Apollonian types.) Berlin: Dion-Verlag, 1940. Pp. 70. RM. 1.90.—P. L. Krieger (Leipzig).

5599. Peters, C. C. The validity of personality inventories studied by a "guess who" technique. *Psychol. Bull.*, 1940, 37, 453.—Abstract.

5600. Roslow, S. The nation-wide validation of a personality test. *Psychol. Bull.*, 1940, 37, 520.—Abstract.

5601. Rotter, J. B. Level of aspiration as a controlled method in the study of personality. *Psychol. Bull.*, 1940, 37, 518.—Abstract.

5602. Schultz, J. H. Charakter und Krankheit. (Character and disease.) *Veröff. Berl. Akad. ärztl. Fortb.*, 1939, 5, 234-242.—Character is formed from the genotypically determined basic traits of personality. Through organic cerebral diseases the personality may retrogress in structure and differentiation to the stage of primitive genotypical reactions without altering the structure of character. On the other hand the receptivity to and the course of disease is transformed by character and personality. The organismic structure reveals itself dynamically as patterned functioning and structured meaning. The will to live is the driving force. Biologically, memory displays large genotypical differences, as it represents a basic characterological function. This is likewise true of the proneness to wrong habits. Still one must be very cautious in ascribing individual traits to constitutional factors because they are far removed from the phenotypical personality, and neurotic faulty attitudes may easily be overlooked.—P. L. Krieger (Leipzig).

5603. Thiele, R. Person und Charakter. (Person and character.) Leipzig: Thieme, 1940. Pp. 43. RM. 2.40.—The soul is seen as consisting of various strata. We experience either as passive, suffering, "paschein," or as active "poiein," beings. The deepest layer, that of the emotions, is subdivided into a somatopsychic layer of the higher feelings and emotions and a thymopsychic layer of drive. Next above is the poiopsychic or noöpsychic layer of the will, free spontaneity, and personal consciousness. Character is the totality of the reactions which a person shows in relation to the human and non-human environment and to himself, his instinctive demands and autochthonous emotional stimuli. The constitutional predispositions represent the intrapsychic conditions of every character trait. Character and person are two different dimensions of consideration. The question of character presupposes knowledge of the structure of the person. Thiele discusses especially the various German layer theories of personality, like those of H. Hoffmann, E. Braun, P. Lersch.—P. L. Krieger (Leipzig).

5604. Thurstone, L. L. A factorial study of visual Gestalt effects. *Psychol. Bull.*, 1940, 37, 456.—Abstract.

5605. Treffer, —. Typische Temperamente. (Types of temperaments.) *Industr. Psychotech.*, 1940, 17, 20-33.—A scheme of temperaments is presented, comprehending in all 10 types. The classification is based on the dichotomy of impulsive and reflective natures. Each of these is divided into an active and a passive mode of functioning, with further subdivisions corresponding roughly to extroversion and introversion. For each of the 2 fundamental classifications a fifth type is added to repre-

sent convergence toward an average. There are thus 2 miscellaneous types. The classical sanguine and melancholic temperaments belong to the impulsive, the choleric and phlegmatic to the reflective natures, 3 new temperaments being added in each case.—H. D. Spoerl (American International College).

5606. Watson, G. Characteristics of adjustment service clients with radical opinions. *Psychol. Bull.*, 1940, 37, 475.—Abstract.

5607. Weizsäcker, V. v. Individualität und Subjektivität. (Individuality and subjectivity.) *Veröff. Berl. Akad. ärztl. Fortb.*, 1939, 5, 51-59.—As in chess, the uncertainty of the counter-move is the methodological assumption of the mind-body relationship. In view of this methodological indeterminacy, the assumption of the subjectivity of life becomes unavoidable and essentially scientific. One function can be understood only in conjunction with other functions. As the superposition of several lawful arrangements, that which is individual is merely the lower stage of individuality. The latter denotes uniqueness, representative unity, progress toward the highest value. Change of functioning is the condition, but subjectivity the core, of individuality.—P. L. Krieger (Leipzig).

[See also abstracts 5519, 5579, 5610, 5639, 5716, 5742, 5761, 5765.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

5608. Barnhart, E. N. The criteria used in preferential judgments of geometrical forms. *Amer. J. Psychol.*, 1940, 53, 354-370.—The present study attempts to determine the reasons for affective choices. 16 solid blue geometrical forms were selected from those analyzed by Birkhoff, who gave them an esthetic measure. They were presented to 50 college women who were asked to arrange them in order of preference. Subsequently they were asked why they made the choices they did. Reasons given could be classified into 3 main types: (1) formal characteristics of the figure, (2) connotative or associative meanings, and (3) potentialities for design. 90% of the S's gave one or more of the formal criteria, usually referring to the whole figure rather than to its parts. 78% of the group gave two or more types of criteria as the basis of their judgments. Analysis of the reasons given revealed a number of dissimilar views. A correlation of .21 between the rankings of this group and Birkhoff's esthetic measure was found. This resulted from the fact that Birkhoff's formula gives high weight to the simple forms, whereas the present S's preferred complex ones.—D. E. Johannsen (Skidmore).

5609. Beckham, A. S. A study of social background and musical ability of superior negro children. *Psychol. Bull.*, 1940, 37, 509.—Abstract.

5610. Blankenship, A. B. The effect of the interviewer upon the response in a public opinion poll.

J. consult. Psychol., 1940, 4, 134-136.—3 experienced interviewers participated in an attempt to evaluate the effects of an interviewer on responses to poll questions. It was found that results secured by each interviewer were essentially similar and that even trained interviewers showed bias in their interviewing. Further research in this area is indicated.—*P. S. de Q. Cabot* (Simmons).

5611. **Bowers, R. V.** Report of 1940 research census. *Amer. sociol. Rev.*, 1940, 5, 623-644.—A report of the results of the 1940 Census of Social Research conducted by the American Sociological Society, listing and annotating 357 titles. The sections on social psychology, on sociology, and on psychiatry contain 59 titles. The entire field is divided into 16 sections.—*I. L. Child* (Harvard).

5612. **Britt, S. H., & Menefee, S. C.** A realistic experiment with newspaper publicity on the Dies Committee. *Psychol. Bull.*, 1940, 37, 475-476.—Abstract.

5613. **Carrington, E. M.** The family in a changing social order. *Educ. Forum*, 1940, 4, 191-197.—The article discusses the many factors that have been operating during the last 10 years to change the status of the family as a unit: the growth of cities, increased leisure time, better wages, greater independence of women, and increased governmental regulation of health, education and economic welfare. The family today is smaller, healthier, more mobile, and has become equalitarian rather than patriarchal. Despite increased salaries and better working conditions, the working family still operates below a minimum desirable standard of living. Children today are seeking recreation outside the home, and the advent of the automobile has affected the morals, courtship, and love life of youth. Church affiliations seem to be on the decline. The author concludes that there is no cause for pessimism in these changes.—*A. Chapanis* (Child Guidance Study; Franklin, Tenn.).

5614. **Cattell, R. B.** The concept of social status. *Psychol. Bull.*, 1940, 37, 472-473.—Abstract.

5615. **Committee of the American Medical Association and the American Library Association.** Books about sex and marriage. Chicago: Amer. Library Ass., 1940. Pp. 5. \$1.00 per 100.—An annotated bibliography of 39 titles on sex education and marriage and its problems.—*H. L. Ansbacher* (Brown).

5616. **Dennis, W.** Piaget's questions applied to Zuni and Navaho children. *Psychol. Bull.*, 1940, 37, 520.—Abstract.

5617. **Dozier, P.** Specific reading disability; a survey. *J. Lancet*, 1940, 60, 202-204.

5618. **Ephron, H. S.** Mental hygiene in social reconstruction. *Amer. J. Orthopsychiat.*, 1940, 10, 458-466.—Our present society has failed to give people sufficient ego satisfaction; so they have turned to escapist activities such as fast driving, jitterbugging, or cocktail parties or have derived vicarious satisfaction from war excitement, spec-

tator sports, etc. Our depersonalized machine economy detracts from ego strength. Other means must be found to re-inforce the ego if we are to become a real democracy, "a united people, instead of resentful regiments of goose-steppers blindly following a Führer!"—*R. E. Perl* (New York City).

5619. **Fearing, F.** Popular movements in relation to social change. *Psychol. Bull.*, 1940, 37, 460-461.—Abstract.

5620. **Gemelli, A.** I progressi della moderna elettroacustica nelle loro applicazioni allo studio del linguaggio. (Advances in modern electroacoustics and their applications in the study of language) *Scienza e Tecn.*, 1938, 2, 193-198.—Gemelli reviews the progress in registration of the human voice, especially after the development of electroacoustics. He refers briefly to his own studies, with special regard to the phonetic value of the vibrations of the vocal chords, and describes the instruments used in his experiments.—*M. E. Morse* (Baltimore).

5621. **Gilbert, G. M.** Sex differences in musical 'aptitude' and training. *Psychol. Bull.*, 1940, 37, 508-509.—Abstract.

5622. **Hudisawa, S.** [The test-intelligence in race psychology.] *Jap. J. Psychol.*, 1940, 15, 121-130.—The result of testing a limited number of Chinese boys from 14-16 years of age who had come from South China to Formosa is reported with special reference to the difference between Tanaka's B-type intelligence test and Awaji's intelligence test of adults.—*R. Kuroda* (Keijo).

5623. **Karlin, J. E.** The isolation of musical abilities by factorial methods. *Psychol. Bull.*, 1940, 37, 456.—Abstract.

5624. **Katz, D.** Resistance to social change. *Psychol. Bull.*, 1940, 37, 461-462.—Abstract.

5625. **Katz, D., & Cantril, H.** An analysis of attitudes toward fascism and communism. *J. abnorm. soc. Psychol.*, 1940, 35, 356-366.—College students at Princeton reject both the labels of fascism and communism, the latter carrying the greater stigma. Knowledge of fascism or communism bears little relation to intensity of opposition. The majority of students feel that the two systems are good for the countries in which they are found. Opposition to the labels of communism and fascism does not extend in equal measures to their doctrines. Disapproval of fascism undergoes a change when its practical difficulties are disregarded; in theory a third of Princeton students are for fascism. More communist than fascist doctrines are acceptable, but with respect to property rights fascist ideas find greater acceptance. The arbitrary method of compelling people to choose sides on a forced-alternative question is justified in that it reveals the same general preference as the affect rating-scale.—*C. H. Johnson* (Portland, Ore.).

5626. **Kelly, E. L.** Psychological factors in assortative mating. *Psychol. Bull.*, 1940, 37, 473.—Abstract.

5627. **Kjerbühl-Petersen, L.** *Psychology of acting.* (Trans. by S. T. Barrows.) Boston: Expression Co., 1935. Pp. xiv + 260. \$3.00.—This is a descriptive and interpretive psychology of the actor and the audience based upon Konrad Lange's theory of esthetic illusion. The material is taken largely from opinions expressed by German actors and dramatic critics of the 19th century, supported by observations and reflections of the author, himself a theater director. Part I is devoted to the illusion of the audience. Esthetic response to drama consists in an oscillation in consciousness between the "reality" and the "art" types of imagination, always involving conscious self-deception. This view is contrasted to perfect empathy, which involves complete participation in the illusion, mistaken for reality. The source of this oscillation is found in various factors in the audience, the actor, the play itself, and the stage; attention oscillates between factors facilitating and factors hindering, not disturbing, the illusion. These factors are discussed. Part II concerns the creative work of the actor, i.e., the actor's creation of the role aided by the spectator's phantasy (the personal illusion), his learning of the part (subjective initial illusion), and his affected but controlled emotion. This latter is contrasted to genuine stage emotion, which is a reciprocal effect upon the actor of his exertion. The hypotheses of empathy, transfiguration, and hypnosis are negated. The acting ensemble is discussed briefly in the final chapter. A bibliography of 136 titles and an appendix of 64 biographical sketches of actors mentioned in the text are included.—*J. T. Cowles* (Illinois).

5628. **Kodama, S., & Ito, S.** *Ainu no bunshin no kenkyū.* (Studies of Aino tattooing.) *Hoppō Bunka Kenkyū Hōkoku*, 1939, 2, 125-236.—The authors investigated the tattooing of 124 Aino women and give a detailed description of the custom. The tattooing of men is also mentioned.—*R. Kuroda* (Keijo).

5629. **Komarovsky, M.** *Selected bibliography on the family, 1935-1940.* *Amer. sociol. Rev.*, 1940, 5, 558-565.—A bibliography of 76 books and monographs and 121 periodical articles.—*I. L. Child* (Harvard).

5630. **Kornhauser, A. W.** *Psychology of social change: plans for the 1941 Yearbook of the S. P. S. S. I.* *Psychol. Bull.*, 1940, 37, 458.—Abstract.

5631. **Krechevsky, I.** *Organized labor and conflict in relation to social change.* *Psychol. Bull.*, 1940, 37, 458-459.—Abstract.

5632. **Landes, R.** *A cult matriarchate and male homosexuality.* *J. abnorm. soc. Psychol.*, 1940, 35, 386-397.—Male homosexuality occurs very widely, but the extent to which it becomes a social problem varies with the attitudes taken towards it. A sharp distinction between the active and the passive homosexual may be made and either one become the object of strong social condemnation, while the other is given a recognized role in society. Among certain American Indian tribes, the passive homo-

sexual has been protected, encouraged to adopt the social and sexual roles of women, sometimes to assume sacred responsibilities, and sometimes allowed to cultivate with social approval the lewd conduct attributed to professional prostitutes. The active homosexual, however, who sought young partners, was an object of contempt. In northern Brazil unusual circumstances encourage certain of the passive homosexuals to forge a new and respected status for themselves, especially in the "condomble" cults. Worship revolves around some 10 West African gods with all female priesthoods. Men considered normal are debarred from priesthood, whereas homosexual males are admitted.—*C. H. Johnson* (Portland, Ore.).

5633. **Lazarsfeld, P. F.** *Studies in the change of political opinions.* *Psychol. Bull.*, 1940, 37, 460.—Abstract.

5634. **Lewis, D.** *The timbre test in the revised Seashore measures.* *Psychol. Bull.*, 1940, 37, 508.—Abstract.

5635. **Rademacher, E. S.** *Democracy and mental hygiene in the home.* *Amer. J. Orthopsychiat.*, 1940, 10, 466-471.—The type of government under which one lives is the basic determinant of one's culture and the pattern of one's home. We are familiar with the differences in home atmosphere between those nations maintaining paternal dominance and those with nationalistic trends of a mother-regarding country. One of the basic reasons for the attitudes of the home which we have developed is the fact that our nation has always symbolized freedom, equality, and the right to pursue happiness. In dealing with behavior problems of children as well as emotional problems of adults, a plan of using democracy in the home has proved most effective. This plan consists in instituting a weekly house meeting which helps to give each member of the family a feeling of belonging and having a part.—*R. E. Perl* (New York City).

5636. **Riess, B. F.** *The rôle of the intellectual in social change.* *Psychol. Bull.*, 1940, 37, 461.—Abstract.

5637. **Roberts, J. A. F.** *Surnames, intelligence and fertility.* *Nature, Lond.*, 1940, 145, 939.—In order to test the view that Welsh immigrants in English cities are of lower average intelligence and greater fertility than the native populations, the Advanced Otis scale was given to a sample of Bath schoolchildren for whom data were also available on the number of living brothers and sisters. The mean index of brightness of 213 children bearing Welsh family names was 102.9, while the mean of 3148 others was 99.8. This difference is not statistically significant; nor is the difference in standard deviations of the same scores. The Welsh children have an average of 2.46 sibs, while the others average 2.59. Again the difference is not significant.—*L. A. Riggs* (Vermont).

5638. **Robinson, F. P.** *Study of higher-level reading abilities.* *Psychol. Bull.*, 1940, 37, 470-471.—Abstract.

5639. Seashore, R. H. Psychological characteristics of superior student and professional musical composers. *Psychol. Bull.*, 1940, 37, 509-510.—Abstract.

5640. Thompson, W. H. Some characteristics of the listening habits of the radio audience in a city of 225,000. *Psychol. Bull.*, 1940, 37, 437.—Abstract.

5641. Thomson, W. A. Socialization-self-seeking and its relationship to certain evaluative attitudes, intelligence, and vocational interests. *Psychol. Bull.*, 1940, 37, 504-505.—Abstract.

5642. Thorndike, E. L. Human nature and the social order. New York: Macmillan, 1940. Pp. xx + 1019. \$4.00.—The author presents facts and principles of the basic sciences of man and especially of psychology with an emphasis upon the nature, causation, and modification of abilities and needs. Part I consisting of 15 chapters is more technical than Part II and deals with abilities, the nature and measurement of wants, mental dynamics, individual differences, the interaction of genes and environments, conflicts of wants, conscience, judgments about values, and facts concerning the possibility and desirability of a natural science of values with reference to its problems, methods, and results. In the final chapter of this section, entitled "Living by Science," the author answers the critics of the aims and methods of science contending that science neither destroys nor conflicts with the freedom, purposes, and imagination of the human race. In 23 chapters comprising Part II the author proceeds to discuss the science of philanthropy and the ways and means of improving the welfare of the present and future generations, natural resources and capital, labor and management, buying and selling, money and credit, ownership, human relations, the function, criteria and operations of good government, and the role of law in its effect upon human nature. The final chapter summarizes the author's social philosophy and a program for the betterment of humanity. The first part concerns "getting better men, providing them with better training, and arranging for the best of them to have more power" while the second is concerned with improving the environment of institutions and customs. Six appendices supplement the text.—*P. S. de Q. Cabot* (Simmons).

5643. Turel, A. Bachofen—Freud: Zur Emanzipation des Mannes vom Reich der Mütter. (The emancipation of man from the realm of the mother.) Bern: Hans Huber, 1939. Pp. 216.—The author makes a comparative study of the teachings of Johann Jakob Bachofen, 1815-1887, who founded the theory that the patriarchy emerged from an original matriarchy, and of the teachings of Freud. Bachofen's hypothesis was formulated from an historical interpretation and reconstruction of the cultural past through a study of archaeology, mythology, paleontology, and poetry, in a fashion similar to the Freudian method and the 2 systems of thought supplement each other in the understanding of mass psychology.—*M. H. Erickson* (Eloise Hospital).

5644. Waelder, R. Psychological aspects of war and peace. Geneva, Switzerland: Geneva Research Centre, 1939. Pp. 56.—Conflict-breeding masses are distinguished from nonconflict-breeding forms of human association by the existence of a split conscience; individuals in masses are led both to greater self-sacrifice and to greater ruthlessness than the same persons would show in individual relationships. They tend to disregard danger, and are prohibited from thinking on certain critical issues. This is explained by the hypothesis that, under certain circumstances, the individual tends to give up one of the gradual achievements of maturity, the internalization of conscience. The commands of a leader, or certain mass-carried ideas, replace the conscience of the individual. In certain emergencies mass-formation is necessary to produce the required degree of cooperative self-sacrifice; on the other hand, it is the greatest single cause of war. Temporary peace may be based on fear of war or on a world community with mass characteristics, but lasting peace can be achieved only in a world of relatively mature individuals who do not have the will to regress and who therefore will not need to adopt mass-formation as a form of regression.—*R. K. White* (Cornell).

5645. White, R. K. An analysis of conversation in autocratic and democratic atmospheres. *Psychol. Bull.*, 1940, 37, 476.—Abstract.

5646. Wulfeck, W. H. Business, industry, and management in relation to social change. *Psychol. Bull.*, 1940, 37, 459-460.—Abstract.

5647. Zipf, G. K. The generalized harmonic series as a fundamental principle of social organization. *Psychol. Rec.*, 1940, 4, 43.—A preliminary statement of the author's observations that the following equation of the generalized harmonic series describes the distribution of communities in India, Germany, and other countries, including those of the U. S. A., larger than 2500 inhabitants when these are arranged in order of decreasing size.

$$AS_n = \frac{A}{1} + \frac{A}{2^p} + \frac{A}{3^p} + \dots + \frac{A}{n^p} : \text{exponent } p - 1.$$

A similar approximate relationship has been observed regarding the national distribution of U. S. A. monetary incomes and of corporation assets. The author promises a publication of the results of a more extensive study of the thesis that a nation is a bio-social entity and that a connection exists between these formulae and the psychology of culture and economics.—*P. S. de Q. Cabot* (Simmons).

[See also abstracts 5280, 5395, 5403, 5428, 5501, 5512, 5525, 5557, 5578, 5589, 5606, 5696, 5741, 5747, 5763, 5777.]

CRIME AND DELINQUENCY

5648. Barbeau, A., & Lecavalier, P. [Criminological profile of general paralysis.] *Hôpital*, 1938, Nov.—The results of more than 11 years of study on the relation between meningeal encephalitis and

criminality are presented. Anthropometric, psychological, social, and medical observations carried on in prisons, hospitals, and asylums lead the authors to conclude that the paretic is potentially a criminal and a delinquent in all stages of the disease but that he is not very dangerous in the scale of criminality. A quarter of the subjects examined were foreigners and syphilitic at the time of entry into Canada.—*A. Chapanis* (Yale).

5649. Berrien, F. K. Possibilities in the use of the ophthalmograph as a supplement to existing indices of deception. *Psychol. Bull.*, 1940, 37, 507.—Abstract.

5650. Bonk, F. Zur Indikation der Entmannung von Sittlichkeitsverbrechern auf Grund von 180 Beobachtungen. (Indications of castration of sexual delinquents based on 180 observations.) *Dtsch. Z. ges. gerichtl. Med.*, 1940, 32, 339-365.—The psychic reaction to castration is usually temporary depression and hypochondriasis. Psychopaths may possibly become somewhat more irritable and labile, although not as a rule. One-third of the castrated were congenitally feeble-minded; of these 3 reacted with schizophrenic-like symptoms. Delinquents who are impelled to sexual crimes not by somatic but by psychic hypersexuality, i.e., incongruity between libido and potency, react less favorably. They will very likely retain their inclination toward sexual substitute activities.—*P. L. Krieger* (Leipzig).

5651. Cantor, N. Selected bibliography on crime, 1935-1940. *Amer. sociol. Rev.*, 1940, 5, 618-622.—A bibliography of 50 books and monographs and 79 periodical articles.—*I. L. Child* (Harvard).

5652. Carmichael, F. A. Mental hygiene and crime. *Ment. Hlth Observ.*, 1940, 7, 17-25.—The author feels that the greatest step toward the reduction of crime will not be achieved by strict attention to the crime itself or to the punishment of its perpetrator but to the economic and social conditions which are responsible to a large extent for its incidence.—*M. Keller* (Butler Hospital).

5653. Day, F., Hartoch, A., & Schachtel, E. A Rorschach study of a defective delinquent. *J. crim. Psychopath.*, 1940, 2, 62-79.—This is an extended account of the life history of a defective delinquent with a personality analysis obtained by means of the Rorschach Test. It is part of a study intended to discover whether the Rorschach is capable of adequately describing the personality of offenders in a form briefer than the ordinary cumbersome case record.—*A. Chapanis* (Child Guidance Study; Franklin, Tenn.).

5654. Farber, M. L. Imprisonment as a psychological situation. *Psychol. Bull.*, 1940, 37, 474.—Abstract.

5655. Glueck, B. Psychological motive in criminal action. *J. crim. Psychopath.*, 1940, 2, 21-53.—"The essential folly of asking ourselves why does this person become a criminal, instead of asking why don't all people become criminals" is the thesis developed in the article. "Psychoanalysis . . .

teaches that people come into the world with impulses and instincts that are not adjusted to society; that they are born as criminal beings, meaning by this that if a little child could realize the demands of its instincts, it would act as a criminal. . . . The motor control of the criminal impulses and the partial exclusion of them from consciousness is the highest accomplishment of adjustment to society in the cultured human being of today."—*A. Chapanis* (Child Guidance Study; Franklin, Tenn.).

5656. Gregor, A. Verwahrlosung und Vererbung. (Delinquency and heredity.) *Handb. Erbbiol.*, 1939, Part 1/2, 1177-1222.—The author discusses the characterological types of delinquents. In boys, delinquency reaches its maximum between 11 and 12 years; in girls, between 10 and 15. Psychoses and epilepsy play a minor role; congenital mental defect is more important, while the psychopathies are the most important of all. In fact, psychopathy is the basis, and not a secondary phenomenon of delinquency. For delinquents up to 16 years, an educational institution is recommended; for those between 18 and 21, a prison for youth. Complete success is attained with 40% of juvenile delinquents; reasonable success with 20%; slight with 10%; and no improvement with the remainder.—*P. L. Krieger* (Leipzig).

5657. Harris, D. B., & Odoroff, M. E. The relation of play interests to delinquency in boys. *Psychol. Bull.*, 1940, 37, 474-475.—Abstract.

5658. Hinsie, L. E. A contribution to the psychopathology of murder—study of a case. *J. crim. Psychopath.*, 1940, 2, 1-20.—The article presents the case history of a murderer diagnosed as schizophrenic. Marked delusions of immortality and power of controlling the universe were characteristic of the patient. The delusional content is given in detail.—*A. Chapanis* (Child Guidance Study; Franklin, Tenn.).

5659. Hofmann, H. Die Formen krimineller Betätigung Schwachsinniger. (The forms of criminal acts of the feeble-minded.) *Öff. Gesundheitsdienst*, 1939, 5, 348-357.—The most frequent crimes of the feeble-minded are larceny, immorality, and arson, as well as the minor, parasitic forms of criminality: begging and prostitution. A specific criminality of the feeble-minded is, however, not demonstrable. The inadequate motivation and execution of the crime is characteristic. The environment plays a relatively large part.—*P. L. Krieger* (Leipzig).

5660. Jiménez de Asua, L. Psicoanalisis, delito y pena. (Psychoanalysis, crime, and punishment.) *Arch. Med. leg. Identif.*, 1939, 9, 407-433.—Psychoanalysis explains crime as a phenomenon of maladaptation and classifies delinquents according to the type of culprit who performs neurotically conditioned acts. This theory reasserts responsibility, since the person is responsible to the extent which his conscience shares in his conduct, and it also postulates a treatment of readaptation by curative and educational methods, as well as a preventive system to strengthen the superego. As to the *jus puniendi*,

psychoanalysis has revealed the affective power in society of the processes of expiation and vengeance, which are unconscious obstacles to an efficient and humane penology. Psychoanalysis gives only partial solutions to criminology because it is too pessimistic in regard to a better future for penal law. The theory and methods of Individual Psychology are more useful, although the problem is so enormous that it cannot be solved by any one theory or method.—*M. E. Morse* (Baltimore).

5661. **Lawson, D. E.** Why man commits suicide. *Hygeia, Chicago*, 1940, 18, 296-299.

5662. **Michaels, J. J.** Psychobiologic interpretation of delinquency. *Amer. J. Orthopsychiat.*, 1940, 10, 501-510.—The author resists and reinterprets the data of Healy and Bronner to show that there is probably a certain kind of psychosomatic disposition which permeates the delinquent individual making him react as differently from the neurotic or the psychotic as they react from each other. "The delinquent is as inextricably rooted to his individual organic structure as he is welded to the cultural milieu in which he develops."—*R. E. Perl* (New York City).

5663. **Morikawa, H.** Hanzaisha nôzui no kekkan mitsudo. (The density of blood vessels in the brains of criminals.) *Psychiat. Neurol. japon.*, 1939, 43, 423.—From 150 brains of criminals the author took small pieces from 9 regions and measured microscopically the number of blood vessels per given area. The number found was regarded as an indicator for the density of blood vessels. The density in the brain of criminals was greater than that of normal individuals in every region of the brain. In violent offenders it was smaller than in frauds, and was markedly great in excessive recidivists.—*R. Kuroda* (Keijo).

5664. **Ortega, L.** La exploración de juicio moral en los delincuentes menores. (Study of ethical judgment in juvenile delinquents.) *Bol. Hosp., Caracas*, 1939, 38, 395-483.—Ortega emphasizes the urgency of finding an objective psychological method for establishing the ethical normality of a subject, without regard to his partial capacities. Of several intelligence tests he finds the one by Terman best adopted to his needs. The I.Q. of delinquents was found to be much lower than that of non-delinquents, and delinquency as well as lack of apprehension of ethical values is ascribed to this low intelligence level. Although intelligence tests are not useful for demonstrating ethical standards, they should be employed and improved.—*E. M. Morse* (Baltimore).

5665. **Sartin, J. M.** Character building and crime prevention. *Ment. Hlth Observ.*, 1940, 7, 11-16.—The causes and prevention of crime are discussed briefly. It is emphasized that efforts toward crime prevention will be most successful when made early in the life of the individual, preferably in the pre-delinquent stage.—*M. Keller* (Butler Hospital).

5666. **Schumacher, H. C.** Studies of physical defects in delinquents. *J. Lancet*, 1940, 60, 213-215.

5667. **Selling, L. S.** Investigation methods in clinical criminology. *J. crim. Psychopath.*, 1940, 2, 80-88.—The article traces the development of techniques used by the Psychopathic Clinic of the Recorder's Court (Detroit) in its attempts to discover the causes of individual criminal behavior and to devise treatment either to palliate the symptoms or actually remove the cause. These methods include: "first, a combination of the autobiography with formal interview and history; second, an evaluation of emotional attitudes through a combination of the Rorschach ink-blot with the polygraph; third, the use of a battery of standardized tests in the hands of a trained psychologist; fourth, a complete knitting together of all of the other facts by means of a free floating psychiatric interview which is not conventional in type."—*A. Chapais* (Child Guidance Study, Franklin, Tenn.).

5668. **Terashima, S.** Hanzaisha nôzui no kenkyû, tokuni shinkei saihô oyobi sono kaku no ôisa. (Studies on the brains of criminals with special reference to nerve cells and the size of their nucleus.) *Psychiat. Neurol. japon.*, 1939, 43, 423-424.—The author measured the size of nerve cells and their nuclei in the brain of larcenists and impostors and found that it was the smallest in intellectual offenders. Their form in criminals in general was of a small or a short type. The results were the same as those Nagasawa found in schizophrenic patients. From the fact that they did not show any atrophy the author concluded that they are of immatured form.—*R. Kuroda* (Keijo).

5669. **Yoshida, C.** Hanzaisha nôzui no kenkyû, tokuni dainô hishitsu kakusô no atsusa narabini shinkei saihô mitsudo. (Studies on the brains of criminals with special reference to the thickness of each layer of the cerebral cortex and the density of nerve cells.) *Psychiat. Neurol. japon.*, 1939, 43, 424.—In 63 cases of larcenists and impostors the author measured the thickness of each layer of the cerebral cortex and the density of nerve cells. The results show that the density of nerve cells in the brain of criminals was greater than that of normal controls and it was the smallest in violent offenders and the greatest in intellectual ones. The thickness of each layer was thinner in the criminals than in normal individuals.—*R. Kuroda* (Keijo).

[See also abstracts 5502, 5772.]

INDUSTRIAL AND PERSONNEL PROBLEMS

5670. [Anon.] Diet, oxygen want and high flying. *Brit. med. J.*, 1940, Part 1, 57-58.—(*Biol. Abstr.* XIV: 10092).

5671. **Baganz, C. N.** The importance of a proper psychiatric survey in the enrollment of the personnel of military forces. *Milit. Surg.*, 1940, 86, 471-477.

5672. **Basu, N. M.** The baneful effects of noise on human beings. *Sci. & Cult., Calcutta*, 1939, 5, 155-158.

5673. **Candee, B., & Blum, M.** The selection of department-store packers and wrappers with the

aid of a battery of psychological tests: study II. *Psychol. Bull.*, 1940, 37, 448.—Abstract.

5674. Davidson, H. A. Mental hygiene in our armed forces. *Milit. Surg.*, 1940, 86, 477-481.

5675. De Silva, H. R. Data from interviewing 10,000 motorists. *Psychol. Bull.*, 1940, 37, 483.—Abstract.

5676. De Silva, H. R., Frisbee, W. H., Jr., Robinson, P., & Cyr, E. Driver manual. Washington, D. C.: American Association of Motor Vehicles Administrators, 1940. Pp. 41.—A summary of the best features of various state drivers manuals and other safety booklets.—W. S. Hunter (Brown).

5677. Evans, S. D. A performance test for bi-manual jobs. *Psychol. Bull.*, 1940, 37, 448-449.—Abstract.

5678. Forbes, T. W. Psychological applications in a new field, traffic engineering. *Psychol. Bull.*, 1940, 37, 482.—Abstract.

5679. Giberson, L. G. Pitfalls in industry for the psychiatrist. *Med. Wom. J.*, 1940, 47, 144-146.

5680. Harrell, T. W. A factor analysis of basic aviation maintenance courses. *Psychol. Bull.*, 1940, 37, 483-484.—Abstract.

5681. Harrell, W., & Faubion, R. Selection tests for aviation mechanics. *J. consult. Psychol.*, 1940, 4, 104-105.—Tests to implement the selection and classification of United States aviation maintenance personnel have been studied. Correlation coefficients between 38 tests and basic grades in 5 technical courses are listed. 4 tests, Thurstone's Surface Development, Mechanical Movements, Identical Forms, and Army Alpha Addition give a multiple correlation of .72 with a composite basic instruction grade obtained from grades in courses of Shop Mathematics, Mechanical Drafting and Blue Print Reading, and Metalwork.—P. S. de Q. Cabot (Simmons).

5682. Hüttner, H. Psychotechnik des Signalwesens. Erkennbarkeit von Zeichen auf verschiedenem Hintergrunde. (Psychotechnics of signalling. Identifiability of signs against a varied background.) *Industr. Psychotech.*, 1940, 17, 34-39.—Visibility of miniature semaphores against a homogeneous background was studied for the various combinations of black, white, red, green, and orange. This was measured in terms of illumination required for observations at distances of 8, 16, 24, and 32 m. Tabulations give rank-orders for color combinations at these 4 distances; combinations having the greatest contrasts in brightness are more easily seen at any distance. Applications are made to lettered signs.—H. D. Spoerl (American International College).

5683. Jankoff, G. Die Wirkung von Temperaturschwankungen auf das Gehör. (The effect of temperature variations on hearing.) *Msschr. Ohrenheilk.*, 1940, 74, 219-241.—The locomotive engineer has to do especially heavy physical work and is exposed to marked temperature changes, affecting the right ear more than the left. The brakeman, on

the other hand, works in a uniform temperature, either higher or lower. Engineers suffer from vocational deafness more frequently than brakemen, the right ear being more involved than the left.—P. L. Krieger (Leipzig).

5684. Jeju, V. G. Considerațiuni asupra organizării științifice a muncii (Taylorismul). (Considerations of the scientific organization of work—Taylorism.) *J. de Psihoteh.*, 1940, 4, 45-88.—The author, after presenting an historical and critical review of industrial management, analyzes the fundamentals of Taylorism, then develops the general principles of scientific management and relates them to syndicalism, materialism, socialism, and Bolshevism.—G. F. J. Lehner (Miami).

5685. Karpovich, P. V., & Pestrecov, K. Mechanical work and efficiency in swimming crawl and back strokes. *Arbeitsphysiologie*, 1939, 10, 504-514.—(*Biol. Abstr.* XIV: 10321).

5686. Margaria, R. Über den Wirkungsgrad beim Bergaufgehen. (Degree of efficiency in mountain climbing.) *Arbeitsphysiologie*, 1939, 10, 515-520.—(*Biol. Abstr.* XIV: 10097).

5687. Matsunoki, F. Denki jūgyōin no gyōmujō saigai. (Accidents to electric operatives.) *Tokyo Iji Ss.*, 1939, No. 3163, 2999-3001.—In an electric company the frequency of accidents was 8.1% as compared with 34.09% in the construction works and 17.54% in the power house. The accidents occurred most frequently in summer and during the time from 10-11 a.m. The injuries suffered were usually on the head.—R. Kuroda (Keijo).

5688. Mira, E. Die Arbeit der Psychologen im spanischen Bürgerkrieg. (The work of psychologists in the Spanish civil war.) *Industr. Psychotech.*, 1940, 17, 39-47.—Translation of XIII: 5903.—H. D. Spoerl (American International College).

5689. Moore, B. V. Interpreting psychological data to those who must use them in industry. *J. consult. Psychol.*, 1940, 4, 106-113.—A description of a teaching program in psychology under the auspices of Pennsylvania State College with foremen and supervisors in industrial organizations as students.—P. S. de Q. Cabot (Simmons).

5690. Roe, G. C. F. Psychological effects of war. *Publ. Hlth Lond.*, 1940, 53, 123-124.

5691. Seidman, J. M., & Watson, G. Satisfaction in work. *J. consult. Psychol.*, 1940, 4, 117-120.—Causal factors of job satisfaction were studied in 190 American-born unmarried men, aged 16-24; they were "unemployed high school graduates who had held two or more full time jobs during a total experience of at least one year." 15% found no job interesting and 2% all jobs interesting. The reasons for satisfaction in order of decreasing importance were: vocational aspirations; congenial work conditions and social contacts; initiative, responsibility and prestige; variety of tasks; opportunity for promotion; short working hours; salary.—P. S. de Q. Cabot (Simmons).

5692. Smeltzer, C. H. A study of an unassembled civil service examination technique for administrative positions. *Psychol. Bull.*, 1940, 37, 449.—Abstract.

5693. Smith, K. R. Work sample, dexterity tests, and ratings in the prediction of a motor task performance. *Psychol. Bull.*, 1940, 37, 448.—Abstract.

5694. Williams, A. C., Jr. Muscle tension in student pilots during flight. *Psychol. Bull.*, 1940, 37, 484.—Abstract.

[See also abstracts 5262, 5266, 5276, 5509, 5544, 5548, 5646, 5724.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

5695. Abe, K. Kyôdo no juken junbi to jidô no hatsuiku. (Hard preparation for the entrance examination and the development of children.) *Tohoku med. J.*, 1939, 25, 344-347.—The preparation for the entrance examination for the middle school does not affect the development of the children while still in primary school.—R. Kuroda (Keijo).

5696. Agnew, D. C. The effects of varied amounts of phonetic training on primary reading. Durham, N. C.: Duke Univ. Press, 1939. Pp. viii + 50. \$1.00.—This volume reports two studies on the controversial subject of the effect of training in phonetics upon reading ability. In the first study, third grade children were equated for MA, I.Q., and rate of progress in school, but differed in the amount of their phonetic training. Group tests of silent reading and vocabulary, and individual tests of oral reading, word pronunciation, eye-voice span, and phonetic ability were given. Differences between groups on these tests were small and inconsistent. In the second study children who had been given a larger amount and more consistent phonetic training were used. Comparing the performance of these children with those in the first study showed that the second group obtained significantly higher scores on all tests except those of speed and accuracy of silent reading, indicating that intensive phonetic training does produce an improvement in certain reading abilities.—D. E. Johannsen (Skidmore).

5697. Benze, R., & Gräfer, G. Erziehungsmächte und Erziehungshoheit im Grossdeutschen Reich. (Educational powers and educational authority in Greater Germany.) Leipzig: Quelle & Meyer, 1940. Pp. 353. RM. 11.—M. E. Morse (Baltimore).

5698. Brix, W. Möglichkeiten und Aufgaben der psychologischen Erbanalyse bei Sonderschülern. (Possibilities and tasks of psychological analysis of heredity in ungraded pupils.) *Dtsch. Sonderschule*, 1940, 7, 79-82.—P. L. Krieger (Leipzig).

5699. Burgum, L. S. The value of high-school psychology. *Sch. & Soc.*, 1940, 52, 45-48.—In North Dakota psychology is offered as a one semester elective course in grades XI and XII. Students

taking the examination in it were asked to discuss its value and to name specific ways in which it had helped them. 78% said it had helped them to understand themselves, 51% learned better study methods from it, 31% were interested especially in the physiological basis of behavior, 27% were helped in dealing with habits, and 15% in vocational adjustment. Various other benefits were mentioned. In general the students considered the course so valuable that it should be required and given in the grades as well. There is need for revision of text books for use in such classes.—M. Lee (Chicago).

5700. Drake, C. A. An examination-marking experiment. *Sch. & Soc.*, 1940, 52, 95-96.—Members of two elementary classes in general psychology were given both an essay type examination and true-false tests. The essay papers were scored in percentage grades by 7 teachers. Wide discrepancies appeared between the absolute grades given by different scorers, but the relative grades were remarkably consistent. The rankings correlated .81 to .99 with an average agreement of .87 with composite rankings. This is better than the reliabilities of true-false tests which were .71 and .76. The scores of the two types of examination correlated only .37 and .55 indicating that different mental sets or abilities are involved. A combination of the results of both tests by some arbitrary method, using for the essay type average rankings to which percentages are assigned, would be desirable.—M. Lee (Chicago).

5701. Dunlap, J. W. Simplification of the scoring of the Strong Vocational Interest Blank. *Psychol. Bull.*, 1940, 37, 450.—Abstract.

5702. Elkind, H. B., Henderson, B. M., & Dane, H. R. Mental hygiene needs of first and second grade children. *Mon. Bull. Mass. Soc. ment. Hyg.*, 1940, 19, 1-2, 4.

5703. Flanagan, J. C. The validity of teachers' ratings. *Psychol. Bull.*, 1940, 37, 467.—Abstract.

5704. Greene, J. E. The prediction of non-enrollment in school among white and negro children in 159 Georgia counties. *Psychol. Bull.*, 1940, 37, 468-469.—Abstract.

5705. Hackman, R. C. The differential prediction of success in two contrasting vocational areas. *Psychol. Bull.*, 1940, 37, 451-452.—Abstract.

5706. Hasse, H. Wie bringe ich die Taubstummen mit Lust zum verständlichen Sprechen? (How to teach speech to deaf-mutes in a pleasurable way.) *Dtsch. Sonderschule*, 1939, 6, 9-18.—P. L. Krieger (Leipzig).

5707. Iinuma, R. [A result of addition test.] *Jap. J. Psychol.*, 1940, 15, 131-141.—A series of 2 single digit numbers and their addition, some of which were intentionally misprinted so as to contain errors, was presented and the subjects were asked to mark any errors found. 2 kinds of errors were made by the subjects; they either overlooked the printed errors, or took right answers for mistakes.

A suggestion in the explanation of these errors is mentioned.—*R. Kuroda* (Keijo).

5708. **Just, G.** *Erbpsychologie der Schulbegabung.* (Heredity psychology of scholastic aptitude.) *Handb. Erbbiol.*, 1939, 5, Pt. 1, 538-591.—School achievement is better adapted for the prediction of a person's life accomplishment than is vocational success, although scholastic aptitude is a very complex quantity, the study of which requires the conquest of numerous methodological difficulties. School reports and test results often show a high correlation. The parallelism of achievement between grandparents, parents, and grandchildren can be explained only by heredity. The qualitative differences in scholastic achievement of teachers in higher institutions and physicians refer less to the degree than to the type of aptitude. In other respects, scholastic achievement is clearly related to general ability and vocational success.—*P. L. Krieger* (Leipzig).

5709. **Knight, E. W.** *Twenty centuries of education.* Boston: Ginn, 1940. Pp. 640. \$3.25.—A history of education which examines the principal forces and events, from ancient times to the present day, that have influenced the foundations of modern education.—(Courtesy *Publishers' Weekly*).

5710. **Krimsky, E.** *Orthoptics at the crossroads.* *Arch. Ophthalmol.*, Chicago, 1940, 23, 619-622.—The author deals with the difficulties of orthoptic training as carried out under direct supervision of the ophthalmologist and notes the need for attention to many psychological aspects of orthoptics. The idea that technicians be entrusted with orthoptics is rejected. Instead it is suggested that "the teacher as psychologist may serve as the natural complement to the ophthalmologist as clinician in the correction of squint." Since the teacher can be assumed to be familiar with the peculiar mental makeup of the individual child, she is in a position to do this without too much interference with her regular work and with the child's program of work and play. Frequent checkups with the directing ophthalmologist are then recommended.—*M. R. Stoll* (American Optical Company).

5711. **Learned, W. S., & Hawkes, A. L. R.** *An experiment in responsible learning; a report to the Carnegie Foundation on Projects in Evaluation of Secondary School Progress, 1929-1938.* *Carnegie Found. Advanc. Teach. Bull.*, 1940, No. 31. Pp. 61.—"The underlying aim of the proposed plan was, if possible, to replace the course 'unit,' the 'credit,' and the teacher's 'mark' as dominating the pupil's mind, with a healthy and controlling interest in the meaning of ideas and in a pupil's ability to use them intelligently." About 140 X grade boys and girls intending to go to college were selected from three high schools. The basis of pupil selection was "probable fitness to profit by the freer type of study proposed." The fundamental curricular innovation with these pupils consisted in having one teacher direct all the work in a given subject for the remaining 3 years in high school. The substance of the

usual curriculum was not changed but was outlined for the 3 years as the directing teacher saw fit. A control group followed the usual curriculum in the usual way. At the end of the period objective test results were considerably in favor of the experimental group. Follow-up data on those who went on to college are favorable.—*A. H. MacPhail* (Brown).

5712. **Lentz, T. F.** *The opinioneaire technique in vocational guidance.* *Psychol. Bull.*, 1940, 37, 451.—Abstract.

5713. **Murakami, N.** *Jidô no jibi-enkôka shikkan to sono gakugyô seiseki ni oyobosu eikyô.* (Effects of otorhinolaryngological diseases upon school performance in children.) *Gakko Eisei*, 1939, 19, 812-821.—1514 subjects in a primary school were statistically investigated with regard to otorhinolaryngological diseases and their influence upon school performance. 76.8% of the boys and 62.7% of the girls in the elementary course had the diseases; their incidence was the highest in the 3rd year and lowest in the 6th year. The diseases found in the majority were rhinitis, adenoids, and hypertrophic tonsils, from which 87.5% of unattentive children suffered. In general children having hypertrophic tonsils made poor records.—*R. Kuroda* (Keijo).

5714. **Murphy, L. B.** *The nursery school contributes to emotional development.* *Childh. Educ.*, 1940, 16, 404-407.

5715. **Perry, J. D.** *The reliability of high-school averages computed from students' estimates of their high-school grades.* *Sch. & Soc.*, 1940, 52, 63-64.—Students entering the College of the City of New York were asked to estimate their high-school grades. By comparison with the actual grades it was found that these estimates are too high. Students with averages over 80 are more accurate than those with lower grades.—*M. Lee* (Chicago).

5716. **Reed, H. B.** *The relation of Bernreuter personality and Thurstone vocational interest scores to each other and to scholastic and mechanical achievement.* *Psychol. Bull.*, 1940, 37, 449-450.—Abstract.

5717. **Rice, C. L., & Vinton, K. W.** *An experiment in teaching chemistry for testing.* *Sch. & Soc.*, 1940, 52, 43-45.—Believing that the cooperative tests in chemistry do not adequately test the real knowledge of chemistry but only factual knowledge which can be taught by formal drill, the chemistry instructor gave a college preparatory class 6 weeks of general introduction to the subject and then 20 days of intensive drill on factual material. The class was then given the 1937 form of the test and obtained scores better than those obtained by the preceding year's group after a year's work. This does, of course, not mean that they are good chemists for techniques and inductive methods of thinking cannot be so easily acquired.—*M. Lee* (Chicago).

5718. **Ryans, D. G.** *Students' appraisals of their own abilities compared with objective test results.* *Psychol. Bull.*, 1940, 37, 467-468.—Abstract.

5719. Selover, R. B. The use of R. A. Fisher's discriminant function in the analysis of pattern differences. *Psychol. Bull.*, 1940, 37, 447.—Abstract.

5720. Skodak, M., & Crissey, O. L. The relationship between Strong vocational interest scores, stated vocational aims, and intelligence of high school senior girls. *Psychol. Bull.*, 1940, 37, 469.—Abstract.

5721. Spieler, J. Heilpädagogische Ausbildung und Fortbildung im Heilpädagogischen Seminar der Universität Freiburg, Schweiz. (Instruction and training in therapeutic pedagogy at the seminary for therapeutic pedagogy of the University of Freiburg, Switzerland.) *Dtsch. Sonderschule*, 1940, 7, 135-138.—P. L. Krieger (Leipzig).

5722. Strang, R., & Rose, F. C. Problems in the improvement of reading in high school and college. (2nd ed.) Lancaster, Pa.: Science Press, 1940. Pp. 423. \$3.00.—"The aim has been to make the second edition (1st ed., 1938) less theoretical and more useful to the teacher and to the student preparing to teach." Experimental material has been brought up to date. Subjects discussed are: recognition of the reading problem, reading abilities, problems of vocabulary, the school-wide developmental reading program, remedial reading programs, appraisal of reading ability, case studies of reading difficulties, reading materials, reading tests, and how to improve comprehension. Each chapter includes a list of questions to test the student's reading of the chapter, practical problems, and a selected bibliography.—L. M. McCabe (Cambridge, Mass.).

5723. Stuit, D. B. Factors in physics achievement on the college level. *Psychol. Bull.*, 1940, 37, 471.—Abstract.

5724. Super, D. E. The measurement of interest in an occupation vs. patterns of interests similar to those of persons in that occupation. *Psychol. Bull.*, 1940, 37, 450-451.—Abstract.

5725. Tóth, Z. Die Entwicklung des Sonderschulwesens zur einheitlichen Heilpädagogik und ihre Auswirkung auf die Ausbildung der Sonderschullehrer. (The development of the special-schools toward a uniform therapeutic pedagogy and its influence on the training of special-school teachers.) *Dtsch. Sonderschule*, 1940, 7, 127-135.—In addition to the main topic the author discusses parallel trends in the development of therapeutic pedagogy in Germany and Hungary.—P. L. Krieger (Leipzig).

5726. Wagner, M. E. The relation of sibling pattern to academic motivation. *Psychol. Bull.*, 1940, 37, 473.—Abstract.

5727. Yoshimasu, S., & Muramatsu, T. Shōwa 12-nendo Tokyo-shi fushūgaku jidō no seishin-igakuteki chōsa. (Psychomedical investigations of 6 year old children in Tokyo in 1937, whose entrance to primary schools was postponed or who were exempted.) *Psychiat. Neurol. japon.*, 1939, 43, 913-935.—In 1273 children whose entrance to

primary schools was postponed or who were exempted, mental deficiency was found in 40%, psychopathic personality or behavior disorders in 10%, and convulsive disorders in 3%. Of physical disorders disturbance in motility was found in 7%, difficulty in hearing and speech obstruction in 7%, defects in sight in 3%, and other physical diseases and abnormalities in 17%. Further consideration was given to mentally defective children.—R. Kuroda (Keijo).

[See also abstracts 5267, 5392, 5404, 5415, 5566, 5581, 5591, 5593, 5755.]

MENTAL TESTS

5728. Benton, A. L. The performance of young adults on the Kohs Block Designs Test. *Psychol. Bull.*, 1940, 37, 513.—Abstract.

5729. Carlton, T. Performances of mental defectives on the Revised Stanford-Binet, Form L. *J. consult. Psychol.*, 1940, 4, 61-65.—Form L of this test was given to 215 children of both sexes with a mean I.Q. of 62.2, mean C. A. of 14-2, and mean M. A. of 8-5. The test was continued with each child until complete failures were registered in 3 successive test levels. The writer concludes that "if a mental defective fails a whole test-level between the test-age groups IX-XII, the psychologist, in order to obtain the greatest accuracy, should examine the child through two complete age levels beyond the year in which he first fails all test items."—P. S. de Q. Cabot (Simmons).

5730. Doll, E. A. Annotated bibliography on the Vineland Social Maturity Scale. *J. consult. Psychol.*, 1940, 4, 123-132.—An account is given of the developmental stages in the construction and standardization of the scale. 66 bibliographical references are listed with a condensed report of each.—P. S. de Q. Cabot (Simmons).

5731. Dunlap, J. W. Problems arising from the use of a separate answer sheet. *J. Psychol.*, 1940, 10, 3-48.—To determine the effect of the use of separate answer sheets on reliability and validity of test results, the use of articulated, serially numbered answer sheets, articulated, repetitively numbered answer sheets, unarticulated, serially numbered answer sheets, and unarticulated, repetitively numbered answer sheets was compared with the method of underlining the correct response on the test booklet. Results obtained from IVth and VIIIth grade students, were analyzed separately. A preliminary experiment indicated that underlining the answer and indicating it in the parenthesis on the margin was no more valid a measurement than simply indicating the answer in the parenthesis. "Other things being equal, the writer would recommend the use of an articulated, serially numbered answer sheet, particularly if the test is short enough to enable all answers to be recorded on a single side of the sheet."—F. A. Mote, Jr. (Connecticut).

5732. Fernald, M. R. A comparative study of scatter on the original and the Revised Stanford-

Binet scales by the use of retest data. *Psychol. Bull.*, 1940, 37, 510.—Abstract.

5733. Gillette, A. L. The accumulation of some data from clinical material on the Revised Binet, Form L. *Psychol. Bull.*, 1940, 37, 512.—Abstract.

5734. Growdon, C. H. Is the Revised Stanford-Binet scale really an age scale? *Psychol. Bull.*, 1940, 37, 512.—Abstract.

5735. Hebb, D. O. Clinical tests of adult intelligence. *Psychol. Bull.*, 1940, 37, 513-514.—Abstract.

5736. Lorr, M., & Meister, R. K. The concept of scatter in the light of mental test theory. *Psychol. Bull.*, 1940, 37, 511.—Abstract.

5737. Mitchell, M. B. Irregularities of university students on the Revised Stanford-Binet. *Psychol. Bull.*, 1940, 37, 511-512.—Abstract.

5738. Richardson, M. W. The logic of age scales. *Psychol. Bull.*, 1940, 37, 513.—Abstract.

5739. Schaefer, W. C. The relation of test difficulty and factorial composition determined from individual and group forms of primary mental abilities tests. *Psychol. Bull.*, 1940, 37, 457.—Abstract.

5740. Whitmer, C. A. Some factors in human measurement. *Amer. J. Optom.*, 1940, 17, 241-249.—Practically all measurements of aspects of human behavior are indirect measurements, whose reliability and validity must be carefully determined. The increasing mechanization of test procedures is likely to induce a false sense of security in respect to their significance. Actually, interpretation of the scores, as well as interpretation of the immediate responses, and the attitude of the observer toward the test and his emotional set at the time the test is taken may greatly influence results. Finally, a single element in a complex situation may be dubbed the cause in a sequence of events, with frequent association of this cause and its result cited as proof of an essential relation between them. All these sources of error must be kept in mind, and a judicious use of common sense is recommended as indispensable in solutions of human problems of all sorts.—M. R. Stoll (American Optical Company).

[See also abstracts 5402, 5418.]

CHILDHOOD AND ADOLESCENCE

5741. Abel, T. M. Moral judgments of subnormal adolescent girls. *Psychol. Bull.*, 1940, 37, 506.—Abstract.

5742. Anderson, J. P. The relationship between parental affection and dominance and the behavior of children. *Psychol. Bull.*, 1940, 37, 505-506.—Abstract.

5743. [Anon.] 29. Jahresbericht des Institutes für Jugendkunde in Bremen. (29th annual report of the Bremen institute for youth study.) *Industr. Psychotech.*, 1940, 17, 47-48.—This report contrasts findings for 1926-28 with those for 1939-40 in order to emphasize changes that have occurred since 1933. Consistent increases in various physical

capacities and improvement in health are shown. Young people have become notably more secure, confident, and decisive in personal outlook, the greatest difference appearing among those recorded as relatively less capable. Social effectiveness likewise shows marked improvement. Although literacy and calculating ability showed less satisfactory results, "this is doubtless a passing phenomenon due to the stringency of the times."—H. D. Spoerl (American International College).

5744. Basman, J. The rôle of psychiatry in pediatrics. *W. Va. med. J.*, 1940, 36, 199-202.

5745. Bender, L., & Lipkowitz, H. H. Hallucinations in children. *Amer. J. Orthopsychiat.*, 1940, 10, 471-491.—Many American psychologists feel that the child's use of his capacity to fantasy is essentially malicious. However, workers who have made specific studies of fantasy life and hallucinations in the child are less prone to emphasize their negative value. The authors here present 16 cases of non-psychotic children with hallucinatory experiences and analyze a questionnaire on experiences with nocturnal dreams, daydreams, illusory experiences on awakening and falling asleep, and auditory and visual hallucinations, put to 81 children with behavior disorders. They conclude that childhood fantasizing is a normal process of development of the personality. Hallucinations "indicate an immature superego due to unsatisfactory relationships since infancy between the child and its parents, which may be further increased by greater needs in a constitutionally or organically inferior child, and finally released by a completely unsatisfactory reality. They are the child's effort to bridge the discrepancy and to experience a satisfying reality."—R. E. Perl (New York City).

5746. Blanchard, P. Interpreting psychological data to parents. *J. consult. Psychol.*, 1940, 4, 120-123.—A statement of the changed attitude of therapists toward a consideration of children's problems within the last 10 years characterized by the coordination of psychological therapy for the child and case work for the parents.—P. S. de Q. Cabot (Simmons).

5747. Bruch, H., & Touraine, G. Obesity in childhood: V. The family frame of obese children. *Psychosom. Med.*, 1940, 2, 141-206.—Results of an analysis of the family backgrounds of 18 obese girls and 22 boys are reported. The predominating racial background was Jewish. All the family incomes were marginal but no family lived in a slum area. Many fathers were weak and submissive. The mothers had suffered from childhood poverty and insecurity and now reacted with self-pity and resentment. In emotionally insecure families food assumed an exaggerated importance becoming charged with emotional value. Physical activities and social relationships were greatly restricted. Satisfactory marital relationships existed in only a few cases. 70% of the children were either the only or the youngest child. More than 50% of the children had been unwanted. Parents were rarely con-

cerned over the obesity of their children contrasted with anxiety over acute physical disorders. The maternal attitude toward the obesity was one of ambivalence. Parental cooperation and interest in treatment were rarely satisfactory.—*P. S. de Q. Cabot* (Simmons).

5748. **Clarke, E. K.** The psychiatric clinic for children of the University hospital. *J. Lancet*, 1940, 60, 211-212.

5749. Committee of the American Medical Association and the American Library Association. Books about infants. Chicago: Amer. Library Ass., 1940. Pp. 5. \$1.00 per 100.—An annotated bibliography of 37 titles on child training and study, and adolescence.—*H. L. Ansbacher* (Brown).

5750. **Curran, F. J.** Psychotherapeutic problems of puberty. *Amer. J. Orthopsychiat.*, 1940, 10, 510-522.—The author describes in detail 5 cases of adolescent boys showing different types of symptoms which have caused them to be admitted to Bellevue Psychiatric Hospital. They included cases of aggression, sex delinquency, social shyness, schizophrenia, psychoneurosis. The efficacy of group therapy is stressed in addition to individual psychotherapeutic conferences.—*R. E. Perl* (New York City).

5751. **Curran, F. J., & Schilder, P. F.** Problemas de la infancia y adolescencia. (Problems of childhood and adolescence.) *Index Neurol. Psiquiat.*, 3. Aires, 1940, 2, 91-111.—A review of studies made by various authors in the children's and adolescents' wards of the Bellevue psychiatric clinic. The viewpoint is psychoanalytical. The topics treated are the use of symbolism; attitude toward death; the child's ideas of the interior of his body; aggressiveness, especially in the hyperkinesia accompanying brain lesions; gestalt studies, particularly in regard to the emotional problems of motility; suicidal attempts; murders by children; incendiaryism; behavior problems of children having psychotic or criminal parents; problems of puberty; sexual experiences with adults; hallucinations; and imaginary companions.—*M. E. Morse* (Baltimore).

5752. **Dahl, E. E.** When children live in institutions. *Child Welf. League Amer. Bull.*, 1940, 19, 7-8.

5753. **Davis, P. B.** A study of thumb-sucking—summary of a questionnaire answered by 250 parents. *Trained Nurse*, N. Y., 1940, 104, 422-425.

5754. **Faegre, M. E. L., & Anderson, J. E.** Child care and training. (5th ed.) Minneapolis: Univ. Minnesota Press, 1940. Pp. 324. \$2.00.—Slight revisions have been made to bring the text completely up to date. (See XI: 2991).—(Courtesy Publishers' Weekly).

5755. **Filho, R.** Aspectos psicológicos da criança. (Psychological aspects of childhood.) *Cultura méd.*, Rio de J., 1939, 2, 173-177.—In a study of the child mind, Filho stresses its differences from the adult mentality and its connections and analogies with the primitive and psychotic. The recognition of

these characteristics ought to improve education. In particular, punishment should be abolished, since children are incapable of understanding such a complicated idea.—*M. E. Morse* (Baltimore).

5756. **Freud, E.** Étude d'un cas de mutité sensorique chez un enfant de dix ans. (Study of a case of sensory mutism in a 10-year-old child.) *Pract. otorhino-laryng.*, 1940, 3, 57-61.—*P. L. Krieger* (Leipzig).

5757. **Gesell, A.** The day nursery as a mental hygiene agency. *Day Nursery*, 1940, 1, 1-3.

5758. **Guttmann, E., & Creak, M.** A follow-up study of hyperkinetic children. *J. ment. Sci.*, 1940, 86, 624-631.—This is a follow-up study, including interview in most cases, of 25 children, aged 5-15 at time of admission, and with IQ range of 89-136. The prognosis for tics is good although a fair proportion of cases keep on having a predisposition for motor responses to individual strain. Choreics display residual motor instability. Follow-up of cases diagnosed merely as being fidgety or nervous suggests that some cases have post-choreic conditions.—*W. L. Wilkins* (Milwaukee).

5759. **Hershfield, A. S.** The mentally handicapped child. *Ill. med. J.*, 1940, 77, 369-371.

5760. **Jones, H. E., & Bayley, N.** Resources for the consultant: skeletal X-rays as indicators of maturity. *J. consult. Psychol.*, 1940, 4, 69-73.—A description of the specific use of roentgenograms in the Adolescence Growth Study at the University of California.—*P. S. de Q. Cabot* (Simmons).

5761. **Kammerer, R. C.** An exploratory psychological study of crippled children. *Psychol. Rec.*, 1940, 4, 47-100.—This is a report of an exploratory attempt to investigate the psychological behavior of 80 crippled children of both sexes around the age of 13, 50 of whom suffered from osteomyelitis and the remainder from scoliosis. All belonged to the lower socio-economic brackets and were patients of a hospital for children. Intelligence and personality tests were given and interviews held with children and parents. Whereas the scoliosis group differed significantly from the Stanford-Binet norm, the osteomyelitis group did not. A low positive correlation was found between maladjustment and duration of crippling. The presence of a physical handicap does not appear to be a sufficient determinant for the development of undesirable traits. Social and personal inferiorities were not traceable to the crippling and very little evidence to support the theory of compensation was found. No general psychological differences were discerned between the scoliosis and osteomyelitis groups. No evidence supported the belief that physical defects are the cause of crippled personalities.—*P. S. de Q. Cabot* (Simmons).

5762. **Langford, W. S.** Some aspects of a mental hygiene program in early childhood. *J. Lancet*, 1940, 60, 195-198.

5763. **Lewis, E. P.** Foster-home placement of problem children. *Canad. publ. Hlth J.*, 1940, 31, 127-132.

5764. Lindsley, D. B. Differences in the electroencephalograms of normal and behavior-problem children. *Psychol. Bull.*, 1940, 37, 496.—Abstract.

5765. Lowrey, L. G. Personality distortion and early institutional care. *Amer. J. Orthopsychiat.*, 1940, 10, 576-586.—On the basis of a study of 28 children reared in infants' homes, the author concludes that infants who are reared in institutions undergo an isolation type of experience which results in unsocial behavior, hostile aggression, lack of patterns for giving and receiving affection, inability to understand and accept limitations, and marked insecurity in adapting to the environment. Infants should not be reared in institutions; however, if they must be, they should undergo the cushioning experience of living in small groups and intimate contact with warm adults before being placed in foster homes.—R. E. Perl (New York City).

5766. Markey, O. B. Assets and liabilities in group living for children. *Child Welf. League Amer. Bull.*, 1940, 19, 1-2; 8.

5767. McGraw, M. B. Neural maturation as reflected in the infant's response to startle. (Film.) New York: Normal Child Development Study, Columbia Medical Center, 1940. 1 reel, 200 ft., 16 mm., silent. \$10.00.—This film shows developmental changes in the neuro-muscular responses of the infant to a sudden stimulus, viz., a forceful stroke with a stick on the bed. The subjects are identical twin boys, stimulated simultaneously. The film was exposed at a rate of 32 frames per second. The characteristic Moro embrace pattern of the newborn reflects a flooding of all motor segments in the neuraxis caudal to the midbrain. Progressive diminution in the intensity of the response, until only a "body jerk" is elicited, reveals an inhibitory influence of the cerebral cortex upon subcortical centers. Developmental changes are also demonstrated by a curve indicating the average duration of each response as manifested by a group of infants.—M. B. McGraw (Columbia Medical Center).

5768. McKinley, G. M. Genetics in child adoption practice. *Child Welf. League Amer. Bull.*, 1940, 19, 3: 7-8.

5769. Mohr, G. J. Influence of mothers' attitudes on mental health. *J. Pediat.*, 1940, 16, 641-646.—The author discusses common attitudes of mothers which may be responsible for their difficulties in child management. Overprotection, attachment as a gratification of the mother's need for affection, rejection, and ambivalence are unhealthy attitudes to which a child may have to adjust in the home. The type of adjustment made to his mother carries over into general life situations and may be responsible for later anti-social behavior.—E. Green (Bradley Home).

5770. Piers, M. W. The mental health of the preschool child. *Ment. Hlth Bull. Ill. Soc. ment. Hyg.*, 1940, 18, 1-4.

5771. Plaut, P. Refugee children in England. *Ment. Hlth, Lond.*, 1940, 1, 37-41.

5772. Riemer, M. D. Runaway children. *Amer. J. Orthopsychiat.*, 1940, 10, 522-527.—Children who repeatedly run away from home show certain characterological abnormalities including antagonism, impulsiveness, distrustfulness, and, paradoxically enough, an occasional attitude of sheepish docility which often has a trigger-like swing to full negativism. Detailed studies of such children often reveal similar early, extremely traumatic, experiences. Cruel treatment in the first year of childhood, severe physical trauma, poverty or death of one or both parents are prominent in the milieu of these children. Running away is a defense attitude hiding a helpless, begging type of personality. The runaway with his extreme negativism and his compulsive running away from reality displays a severe narcissistic disorder.—R. E. Perl (New York City).

5773. Spock, B., & Huschka, M. Temper tantrums. *Child Study*, 1940, 17, 85-86, 94.

5774. Steckel, H. A. The function of a child guidance clinic. *N. Y. St. J. Med.*, 1940, 40, 364-367.

5775. Thomson, G. H. An analysis of performance test scores of a representative group of Scottish children. London: Univ. London Press, 1940. Pp. vii + 58. 5s.—A Binet test and 8 performance tests were given to practically all children born in Scotland February 1-November 1, 1926 (443 boys and 430 girls) and complete tables of the data obtained are published.—M. Lee (Chicago).

5776. Thurstone, T. G. Primary mental abilities of children. *Psychol. Bull.*, 1940, 37, 446.—Abstract.

5777. Twitchell-Allen, D. The development of Eugene, a 23-year-old boy isolated by 17 years of epileptic seizures. *Psychol. Bull.*, 1940, 37, 524.—Abstract.

5778. Van Steenberg, N. J. Analysis of mental growth of school children. *Psychol. Bull.*, 1940, 37, 454-455.—Abstract.

5779. Vila, G. A. Proyecto sobre el problema asistencial de la infancia y de la juventud. (Proposal on the problem of care for children and adolescents.) *Rev. Psiquiat. Disc. conex.*, 1939, 3, 181-190.—Vila stresses the convenience of centralizing the functions of child care and the necessity of appointing school physicians. For normal children he proposes medical, social, and educational aid; vocational advice, and a day-nursery for the needy; for neurotic children special orientation courses are suggested; for the mentally defective, training schools; for minors dangerous to society, rural centers; and for handicapped children, special schools.—M. E. Morse (Baltimore).

[See also abstracts 5278, 5356, 5357, 5420, 5466, 5474, 5511, 5570, 5587, 5616, 5664, 5702, 5757.]

